Scranton Manufacturing Company, Inc., hereafter known as the Company, warrants its New Way Solid Waste Collection Equipment to be free from defects in material and workmanship under normal use when properly serviced and maintained as described in its service bulletins and operational manuals for a period of six months from the date when these products are delivered to the first purchaser.

This warranty is expressly limited to the repair or replacement of any component or part thereof, of any such unit manufactured by the Company, that is proven to the Company’s satisfaction to have been defective in material or workmanship. Such components or parts shall be repaired or replaced at no cost to the first purchaser for parts and labor provided such unit is returned for such repair or replacement with transportation charges prepaid to an authorized Scranton Manufacturing Company, Inc., New Way distributor, or such other facility as may be designated by the Company, within 30 days after discovery of the defect and within six months of the date on which the unit was delivered to such first purchaser.

The Company will furnish without charge FOB its distributor a similar part to replace any part of a product of its manufacture which proved to be defective in material or workmanship while in normal use and service during this period.

Normal adjustments or minor repairs, tightening of fittings or nuts and bolts or replacement of normally wearing or disposable parts such as but not limited to slide blocks, seals, filter elements, bushing, etc., is not considered grounds for warranty.

The warranty is void if any factory unauthorized change, addition, or alteration is made to the machine.

To validate the new unit warranty, an authorized New Way distributor must have completed a predelivery inspection before the unit is placed into service, and the delivery inspection form and warranty card must be signed by both the customer and the distributor and submitted to the Company’s Service Department within two weeks of delivery to the first purchaser of the unit.

Because the Company’s parts are engineered to work only with genuine company parts, this limited warranty will be void and have no effect if: (a) Company parts are modified other than as done at its factory or as authorized to be done by factory in writing or (b) Parts or assemblies of any other manufacturer are used as substitutes for genuine Company parts.

Replacement parts, components and assemblies manufactured by Scranton Manufacturing Company, Inc., are sold under a Limited Warranty to be free from defects in workmanship or material for a period of 90 days, providing the factory inspection reveals a material or a workmanship defect. Labor to replace or repair such part shall be the responsibility of the customer. There is no warranty on expendable items, wear components or used parts.

Scranton Manufacturing Company, Inc. makes no other warranty, expressed or implied, and makes no warranty of merchantability or fitness for any particular purpose. The company does not assume any liability for loss of profits, product, time, or any other direct or indirect or consequential losses, damages or delays. Any improper use, operation beyond rated capacity, substitution for parts not approved by the Company, any alteration, or repairs by others in such manner as in our judgment affects the product materially will thus adversely void this Warranty.
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General

The New-Way Rear Loaders were designed to work hard and withstand the rigors of daily use. The forces used on the packer to compact refuse is accomplished with hydraulic pressures which are created and then directed through hoses to the slide/sweep panel. Extreme care and safety practices need to be used at all times while operating the packer. **The owner is responsible to require all employees associated with this unit, read this manual thoroughly so that they fully understand all the instructions contained within it.**

Publication of these safety precautions does not imply and should not be considered an all inclusive list. It is the operator’s responsibility to learn and follow the proper operational procedures that are in accordance with all safety codes and requirements including the American National Standards Institute (ANSI) requirements and Occupational Safety & Health Act (OSHA) regulations.

ANSI  Z245.1-2007 has been released and should be followed. Failure to operate this machine correctly, or failure to heed warnings in the operator manual or on safety decals, may cause Death or Dismemberment to the operator, co-workers or bystanders.

Safety Decals

Safety Decals are very important and should be clearly seen and obeyed at all times. Pages 1-10 thru 1-17 describe a detailed diagram of where the decals should be displayed. If any of these decals are missing or cannot be clearly read, they must be replaced immediately with the proper decal. New decals can be ordered free of charge from New Way by calling (800) 831-1858.

**Danger, Warning and Caution**

As you are reading this manual you may see “WARNING”, “CAUTION”, and “DANGER” graphics such as you see below. These graphics are there to alert the operator or mechanic of specific safety issues concerning a certain operation. Operators and maintenance personnel shall read the instructions that accompany these graphics and follow them carefully. Compliance and common sense are crucial for safe operational procedures.

The word “NOTE” is also used at times throughout the manual and is followed by information that will clarify or provide emphasis to a certain point in the manual.
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SECTION I
SAFETY PRECAUTIONS

Prior to Start Up

1. At a minimum, Scranton Manufacturing Co., Inc. recommends that operators wear steel toed safety shoes, OSHA approved safety glasses, and appropriate gloves. The company also recommends that operators do not wear any jewelry on their wrists or hands, or loose fitting clothing that could catch on operating levers or moving components of the packer.

2. Do not operate any machinery while under the influence of drugs, alcohol, or other mind altering drugs.

3. Before operating this refuse packer, the person(s) should be properly instructed and trained to be a qualified operator(s) and be familiar with all warning devices, hand signals, and traffic rules.

4. Perform a pre-operation inspection of the unit by walking around it and:

   - Inspect it in accordance with the chassis manufacturer’s guidelines.
   - Inspect it in accordance with the New Way “Refuse Packer” guidelines listed in Section 3 – “OPERATION” of this manual. DO NOT START OR OPERATE ANY EQUIPMENT THAT IS MALFUNCTIONING.
   - Make sure all obstructions and people are clear.
   - Inspect all chains, hooks, and cables and replace if they are worn out or damaged.
   - Inspect all lights, back-up and tailgate ajar alarms and rear-vision camera if so equipped.
   - Check all mounting bolts, cylinder pins, and other fasteners for placement and tightness. Adjust or replace as necessary with the same grade and size.

5. Any malfunctions should be reported to a supervisor or mechanic. Before walking away from a malfunctioning unit do the following:

   - Set the parking brakes.
   - Disengage the PTO.
   - Turn off the engine.
   - Remove the ignition key. Place key in pocket or transfer to authorized repair person.
   - Authorized repair person must employ lockout/tagout procedure before performing repairs. (See Lockout/Tagout Procedure beginning on page 4-1)
6. Any service work completed on the unit should be done with the proper tools and procedures as shown in this service manual. Only authorized personnel should attempt the repair work. Use ONLY proper replacement parts on the unit.

7. If the height of the unit has been altered by the installation of a container handling system, recheck the overall height and make sure this height plus three inches is noted on the decals.

8. Thoroughly understand how every operating control functions. Be aware of the function and location of every instrument, control, gauge, and protective device.

9. Know where to get help in case of an emergency.

General Operation

1. The operator is responsible for making sure that operation of this unit is in accordance with the instructions contained in this manual and all codes including those of the Occupational Safety and Health Act (OSHA) regulations and the American National Standards Institute (ANSI) standards.

2. Do not operate any equipment without proper instruction and training.  
NOTE* A good source for training is “Coaching the Refuse Truck Driver II” from “National Solid Wastes Management Association”, Washington, D.C. Call (800) 424-2869 for pricing information.

3. Before operating this refuse packer, the operator(s) must be properly instructed and trained to be a qualified operator(s). They must be familiar with all danger, caution and warning decals, warning devices, hand signals, and traffic rules.

4. Know the function and location of all instruments, gauges, protective devices, and controls of the unit.

5. Know where to get help in case of an emergency.

6. Each day, prior to the first cycling of the packer panel, open the side access door and visually inspect the area behind the ejection panel. Also inspect the internal body cavity and hopper for abnormal obstructions, equipment, or personnel.

7. Make sure the “back-up” warning alarm is working properly.

8. Notify the manufacturer of any malfunction or any other observation that could be unsafe for the operator. The manufacturer’s name and address are on the cover of this manual.

9. Refer to chassis manufacturer’s manual for safety precautions on the chassis.
10. Any damaged Safety or Operational decals should be replaced immediately. Contact New Way at (800) 831-1858 to order free replacements. (Refer to the diagram on Page 1-10 thru 1-17).

11. Before operating the unit, put on proper safety equipment such as protective shoes, glasses, appropriate gloves and a safety vest. Also, turn on appropriate warning lights.

12. Seat (safety) belt must be worn at all times - It’s The Law!

13. When starting the unit’s engine, use the proper procedure as listed in the chassis manufacturer’s instruction manual.

14. Before moving the unit or operating any controls make sure co-workers can be seen and that they are in a safe position.

15. While operating the unit, all access doors and service-opening covers must be latched in place and maintained.

16. Personnel should ride only in the cab or on the proper riding platforms designed specifically for this purpose. Personnel are prohibited from riding on any specified riding platforms or steps if vehicle speeds will exceed 10 mph, or if the vehicle will be travelling further that 2/10 of a mile without stopping. Personnel must never dismount any part of the vehicle when it is in motion.

17. Keep side access door and rear tailgate in closed and latched position.

18. Never operate the equipment with the side access door in the open position.

19. Never allow anyone to ride on the steps when the unit is backing up.

20. Never “push” or “tow” anything with the unit.

21. Before traveling in reverse, make sure the area behind the unit is clear of obstructions and then move the vehicle as slowly as possible. Do not travel in reverse further than distances allowed by local ordinances. If traveling in reverse further than ten feet use a “guide.”

22. Stop unit immediately if the warning light for the “tailgate ajar” system comes on.

23. Before leaving the cab, always set the parking brake.

24. Controls or hoses should never be used as hand holds.
25. To prevent unwanted engine speed-up if the tailgate slide panel control lever is shifted, keep the dashboard accelerator solenoid switch in the “OFF” position when parked or between pickups.

26. Before starting to load the packer, make sure all tailgate locks are properly engaged.

27. The hopper should never be loaded above the loading sill and refuse should never extend outside of the hopper when packing.

28. Only load refuse into the hopper when the sweep panel is in the closed position. Never load refuse into the hopper once the packing cycle has been started.

29. If the accelerator system is engaged, do not step on the throttle.

30. The sweep and slide panel control levers should be allowed to shift automatically.

31. Do not place head, body, hands, arms, fingers, or any limbs, etc. into a pinch point or any moving parts. Death or Dismemberment May Occur.

32. Do not attempt to dislodge any material unless wearing “approved” safety glasses or a full-face shield.

33. The edge of the sweep panel should not be used as a cutting tool. If the sweep panel cannot clear all the refuse in the hopper, stop the sweep panel in its downward stroke before crushing glass bottles or similar items. Rotate the sweep panel to the closed position; then continue to cycle as needed.

34. Use only rear-load containers which are compatible with the New Way container attachment.

35. Never use this unit to transport a container from one location to another.

36. Container handling cables or chains should never be used for pulling or towing.

37. Container lids should be closed and latched when not being handled.

38. If a container is not on the ground, the rear loader’s packing device should not be used.

39. Set the vehicle parking brake before handling a container.

40. Latch both container latch arms before attempting to lift containers.

41. Raise the container slowly and smoothly.
42. Do not slam the container against the packer container stops or tailgate.

43. Do not attach the hook to any lift point which will not be completely encircled by the hook with the hook safety latch closed. Do not remove the hook safety latch.

44. Read and obey all container decals issued by the container manufacturer.

45. Read and follow container manufacturer’s information on accepted use practices.

46. Do not attempt to lift overloaded containers.

47. Center the container on the attachment.

48. All containers should be inspected and repaired if not in a safe, usable condition.

49. Do not use a non-standard or damaged trunnion bar.

50. Never cross under a raised container.

51. Stand clear when dumping containers.

52. In cold weather, make sure container is not frozen to the ground before attempting to lift it.

53. When using an eye type container attachment point, the base of the hook must be positioned to lift on the inside of the eye.

54. If debris needs to be cleaned from container, first make sure the container is firmly on the ground, then reach inside with a probe or other tool – Do not use hands. Never place any part of the body between the packer body and the container.

55. When not in use, attach hook to the hook break away on the tailgate and eliminate slack before moving the vehicle. While eliminating slack, do not hold the hook on an attachment point as this could result in a pinch point or injury.

56. Make sure there is enough overhead clearance before dumping a container.

57. Place the container on a flat, level surface.

58. Detach container before moving the vehicle.

59. Do not attempt to unload uphill, into the bank of a hill, or against a pile of garbage.
60. When unloading, cycle the sweep/slide panel to the fully closed and raised position to clear the hopper of all refuse before raising the tailgate to prevent the center of gravity from shifting to a point behind the rear axle.

61. Never walk or stand under the tailgate when in the raised position.

62. Before opening the tailgate, be sure there is sufficient overhead clearance.

63. Before raising or lowering the tailgate, warn others and make sure that they are clear of the area.

64. Stand clear during the unloading cycle and when the tailgate is being raised or lowered. If debris needs to be cleaned from the hopper manually, do not use your hands or stand under the raised tailgate. Use a shovel or other suitable tool.

65. Never move the unit with the tailgate raised unless it is needed to assist unloading of packer contents.

66. The tailgate should always be raised and lowered slowly.

67. Proper maintenance and service of the equipment is necessary to ensure safe and reliable operation. Follow the maintenance schedule and conduct repairs as needed.

68. The following minimal lockout/tagout procedure must be completed before entering into or under any part of the packer.
   – Park on level surface.
   – Engage the emergency/park brake.
   – Disengage the power take-off, pump controls, accelerator switch and place all control handles on the packer in the centered neutral position.
   – Turn off the truck ignition. Remove key.
   – Place the truck keys in pocket.
   – Attach “DO NOT OPERATE” tag or cover on steering wheel.
   – Chock the wheels.
   (Refer to the LOCKOUT/TAG OUT Procedure beginning on page 4-1.)

69. In the event the tailgate must be in the open position during maintenance, securely block tailgate and thoroughly test method of blocking prior to proceeding. (Also refer to number 5 on page 1-2). Tailgate Safety Props have been pre-mounted at the factory for this purpose, and include an operation decal stating proper use procedures to obtain the required two feet of clearance.

70. All hydraulic pressure and electrical programming settings, including over-speed and accelerator settings, are set at the factory and should not be modified. Modifications to these settings may create safety hazards and/or cause serious damage to the equipment. Any modifications to these settings not authorized by the Customer Service Manager or the Chief Engineer of Scranton Mfg. will void warranties.
71. This manual in its entirety is to be considered a permanent part of the equipment. In the event there is a transfer of ownership the manual should be included/transferred with the equipment.

72. Scranton Manufacturing must be notified of the name and address of the new owner in order to make the new owner aware of any safety or service bulletins issued. Scranton Manufacturing can be reached at (800) 831-1858.

### Hydraulics

1. Hydraulic fluid flows through at very hot temperatures and can cause burns. To protect yourself from such burns, do not touch cylinders, piping, or hoses.
2. When checking for hydraulic fluid leaks never use the hands since escaping hydraulic fluid can cause injuries.
   
   (DANGER)-“High Pressure Injection of Hydraulic Fluid through the skin and into the bloodstream may cause serious injury and/or Death.”

### Fire Protection

1. Always have a fire extinguisher available and check it monthly to make sure it is full and operable.
2. Never have an open flame around flammable materials.
3. Never load smoldering ashes into your packer because they could ignite the refuse.
4. Thoroughly check all hydraulic hoses and tubing for wear that may cause leaks.
5. Repair all hydraulic leaks immediately.
6. Remove any debris that is near the vehicle exhaust sytem.
Housekeeping

1. Keep driving area, as well as steps and handholds, clean and free of debris and grease.

2. Make sure maintenance equipment, etc. is kept away from packer controls so they cannot be accidentally activated.

Shutdown

1. Set parking brake.

2. Put all controls in neutral.

3. Disengage PTO.

4. Shut off accelerator dashboard switch.

5. Shut off engine.

6. Shut off all accessory switches; work light, strobe or beacon light.

7. Remove ignition key.

8. Lock vehicle.
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Decal Placement

FOR COMPLETE DECAL KITS

9RL PART #110869
11RL PART #101419
13RL PART #110284
16RL PART #110524
18RL PART #110282
20RL PART #107237
25RL PART #107241

Logo
A (qty-2)

White Reflective Sheeting
B

Red & White Reflective Sheeting
C

Amber Reflector
D (Qty-2)

Red Reflector (ROUND)
E (Qty-2)

Red Reflector (RECTANGLE)
F (Qty-2)

Serial Number Riveted
G (Qty-1)

Serial Number Adhesive Backed
H (Qty-1)
Decal Placement

1a (Qty 1) Part #110422
1b (Qty 1) Part #110423
1c (Qty 1) Part #110424
1(Qty-1) Part #101425
3 (Qty-4) Part #101433
2 (Qty-2) Part #101424

\[\text{SECTION I}\
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\]
Decal Placement
Decal Placement

**NOTICE**

Operator Responsibility:
1. Inspect riding steps before each use.
2. Make sure steps are secure.
3. Never ride on damaged, bent or broken steps.
4. Notify supervisor if steps need repair.
5. Keep steps clean of all debris.
6. Make sure steps are clean of grease or slick material before using.

**Step Repair:**
1. Never make a temporary repair on steps that have major damage.
2. Major step damage should be replaced with original equipment steps.

---

**CAUTION**

STAND CLEAR WHEN CONTAINER IS BEING LIFTED

---

**WARNING**

DO NOT USE RIDING STEPS WHEN THE VEHICLE IS EXCEEDING 16 kph (10 mph), OPERATING IN REVERSE, OR WHEN DISTANCE TRAVELED EXCEEDS 0.3 km (0.2 mi). DO NOT MOUNT OR DISMOUNT STEPS WHEN VEHICLE IS IN MOTION. RIDE FACING THE SIDE OF THE VEHICLE WITH BOTH HANDS ON HAND HOLDS.

---

**DANGER**

Operator must remain at controls when operating. Do not operate controls until all persons are clear of point of operation area(s). Failure to follow these instructions can cause personal injury to self or others.

---

**READ ALL OPERATIONAL MANUALS BEFORE OPERATING THIS MACHINE**

- Pull both handles out to start pack cycle.
- Push both handles in to complete pack cycle.
- To stop pack cycle at any time, manually place handles in neutral position.

---

**CART TIPPER**

- Kick bar
- Winch
- Down
- Up

---

**NOTICE**

1. Clean both sides of ejection panel daily.
2. Clean rear seal after ejection of load.

---

**NOTICE**

- 6 (Qty-2) Part #101430
- 7 (Qty-1) Part #101422
- 8+(optional) (Qty-1) Part #112838
- 9+(optional) (Qty-2) Part #101439
- 10 (Qty-2+2) Part #101437
- 11 (Qty-2) Part #101432
- 12 (Qty-2) Part #101428
- 13 (Qty-2) Part #101429
Decal Placement
Decal Placement

- **ACCELERATOR ON**
  - 14 (Qty-1)
  - Part # 101445

- **DANGER**
  - PINCH POINT
  - STAND CLEAR WHEN PACKER PANEL IS IN MOTION
  - 16 (Qty-1) Part # 101426

- **WARNING**
  - DO NOT CROSS OR STAND BEHIND VEHICLE WHILE IT IS BACKING.
  - 17 (Qty 1) Part # 101427

- **CAUTION**
  - MAXIMUM VEHICLE HEIGHT
  - 18 (Qty-1) Part # 101438

- **WARNING**
  - KEEP ACCESS DOOR CLOSED WHEN IN OPERATION; STOP ENGINE AND REMOVE IGNITION KEY. LOCKOUT/TAGOUT REQUIRED BEFORE ENTERING.
  - 19 (Qty-1) Part # 101436

- **PULL TO RAISE TAIL GATE**
  - 20 (Qty-1) Part # 112637

- **PULL TO PACK PACKER PANEL**
  - 21 (Qty-1) Part # 101422
Decal Placement

**WARNING**

**CHASSIS CAB (DASH OR VISOR)**
*(Qty-1) Part #101436f*

- **WARNING**
  - Rotating shafts are dangerous

- **WARNING**
  - Do not drive or operate machinery or equipment when intoxicated or under influence of drugs.

*Chassis Frame (Optional)*
*(near pto shaft)(Qty-1) Part #37924 (from mounting)*

**CHASSIS CAB (DASH OR VISOR)**
*(Qty-1) Part #110110f*
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COMPACTOR SAFETY RULES

WARNING: IF INCORRECTLY USED, THIS EQUIPMENT CAN CAUSE SEVERE INJURY. COMPACTOR IS TO BE OPERATED ONLY BY AUTHORIZED FULLY TRAINED QUALIFIED PERSONNEL WHO ARE AWARE OF THE DANGER AND FOLLOW THESE SAFETY RULES.

1. READ AND UNDERSTAND THE OWNER / OPERATOR MANUAL AND ALL COMPACTOR SAFETY DECALS COMPLETELY BEFORE OPERATING THE EQUIPMENT.

2. BE SURE THE CONTAINER IS PROPERLY POSITIONED AND SECURELY LATCHED TO THE COMPACTOR BEFORE STARTING THE COMPACTOR.

3. MAINTAIN POINT OF OPERATION AND THE WORK AREA SURROUNDING THE LOADING AREA.

4. DO NOT PUT FLAMMABLE, EXPLOSIVE OR HAZARDOUS MATERIALS IN MACHINE.

5. BE FAMILIAR WITH ALL CONTROLS OF THE MACHINE, I.E. KNOW LOCATION, FUNCTION, AND OPERATION OF ALL LEVERS AND SWITCHES OR JOYSTICKS CONTROLS.

6. IN FREEZING WEATHER, MAKE SURE CONTROLS ARE FREE OF ICE BEFORE OPERATING.

7. BEFORE ACTUATING CONTROLS, BE CERTAIN THAT ALL INDIVIDUALS ARE CLEAR OF THE LOADING AREA - PINCH POINT AREA - POINT OF OPERATION AREA. REMAIN AT CONTROLS, “READY” TO REVERSE OPERATION IF AN INDIVIDUAL ENTERS ONE OF THESE DANGER AREAS.

8. WEAR SAFETY GLASSES / GOGGLES FOR EYES, AND APPROPRIATE GLOVES FOR HAND OPERATION.

9. NEVER REACH INTO OR ENTER THE LOADING / CHARGING AREA UNLESS THE PRESCRIBED LOCKOUT MEASURES HAVE BEEN TAKEN TO PREVENT ACCIDENTAL START UP OR MOVEMENT OF COMPONENTS.

10. TO PREVENT OPERATION BY UNAUTHORIZED PERSONS, REMOVE IGNITION KEY AND PLACE IN YOUR POCKET, THEN ATTACH A LOCKOUT TAG TO THE STEERING WHEEL, I.E. FOLLOW THE PRESCRIBED LOCKOUT / TAGOUT PROCEDURES.

11. FULLY RETRACT EJECTION BLADE BEFORE UNLOCKING / UNLATCHING THE TAILGATE.

12. HAVE ALL PERSONS STAND CLEAR OF TAILGATE AND UNLOADING AREA BEFORE AND DURING THE UNLOADING PROCESS.

13. REPORT ANY DAMAGE TO, OR MALFUNCTION OF, THE EQUIPMENT TO THE RESPONSIBLE AUTHORITY. DO NOT CONTINUE OPERATION IF THE DAMAGE OR MALFUNCTION JEOPARDIZES SAFE OPERATION. BE SURE ALL SAFETY DEVICES ARE OPERATING CORRECTLY.

14. BEFORE ANY MAINTENANCE WORK IS BEGUN, INSTITUTE LOCKOUT / TAGOUT PROCEDURES IN THE OWNER / OPERATOR MANUAL.

15. THE HYDRAULIC SYSTEM WHICH POWERS THE COMPACTOR IS HIGHLY PRESSURIZED. NEVER CHECK FOR LEAKS USING YOUR HANDS. IF INJURED BY HYDRAULIC OIL UNDER PRESSURE, SEE A DOCTOR IMMEDIATELY. BEFORE DISCONNECTING HYDRAULIC LINES, RELIEVE ALL PRESSURE BY BACKING OFF THE CYLINDER UNTIL EXTERNAL LOAD IS RELIEVED. SHUT DOWN HYDRAULIC SYSTEM AND OPERATE HYDRAULIC CONTROLS AGAIN TO RELIEVE RESIDUAL INTERNAL PRESSURE. WHEN CONNECTING THE LINES, BE CERTAIN THAT ALL CONNECTIONS ARE TIGHT. DO NOT EXCEED HYDRAULIC PRESSURE SETTINGS.

16. IF EQUIPPED WITH CART TIPPERS, CONTAINER TIPPERS OR ARTICULATED ARM, STAY CLEAR OF ANY MOVING PARTS OR POTENTIAL PINCH POINTS WHILE UNIT IS IN OPERATION.

17. CHECK OVERHEAD CLEARANCE OF ELECTRICAL LINES, ETC. BEFORE OPERATING ANY EQUIPMENT OR OPTIONS THAT WILL RAISE INTO THE AIR AND COULD CONTACT OVERHEAD OBSTRUCTIONS BY THEIR NORMAL USE.

18. REMEMBER, OPTIONS THAT CAN BE RAISED, MUST BE IN THEIR TRAVELING POSITION BEFORE TRAVELING.

19. IN THE EVENT OF A FIRE IN THE COMPACTOR:
   A. CALL FIRE DEPARTMENT.
   B. CLOSE ALL OPENINGS TO CONTAIN FIRE WHEN POSSIBLE.
   C. BE PREPARED TO ASSIST FIRE DEPARTMENT.
Terms You Will Need To Know

- Slide Panel
- Sweep Panel
- Hopper
- Loading Sill
- Ejection Panel
- Oil Tank
The NewWay Rear-Loaders were created to safely and efficiently load, compact, transport, and unload refuse. The following text describes, in basic terms, how the packer accomplishes those tasks. For more detailed instructions see Section Three.

Loading

With the packer body empty, the ejection panel should be positioned at the rear of the packer. The first thing that happens in the process is that the refuse is loaded into the hopper of the tailgate assembly. The slide and sweep panels should be in the “closed” position at this time.

Compaction

After the refuse is loaded into the hopper, the operator starts the packing cycle. During this cycle, the slide and sweep panels move rearward, over the load.

Then, the slide and sweep panels automatically stop at the “interrupted cycle” position.

Safety Gap
Loading Sill

Prior to proceeding to the next step, the operator must visually inspect the loading sill for any obstructions or personnel.
Compaction (continued)

After the “interrupted cycle” position is reached, the operator must activate the packing cycle again. When the operator does this, the slide and sweep panels move forward sweeping the refuse from the hopper up into the body and packing it against the ejection panel. When the cycle is completed, the slide and sweep panels come to rest in the “closed” position. The hopper is now ready for more refuse to be placed inside.

While compaction is occurring, hydraulic pressure is being applied to the cylinders that move the slide and sweep panels. This results in a highly compacted load and allows for a large refuse capacity.

The ejection panel is equipped with a back pack function that allows the panel to move forward automatically.

When full, the packer can be unloaded.

Unloading

To begin the unloading process, first, release the tailgate locks, then, raise the tailgate.

After tailgate has been fully raised, move the ejection panel to the rear of the body. This will push out the load.

After Unloading

Return the ejection panel to the forward position. The tailgate can now be lowered and locked to the body.
Container Attachment

The New Way Container Attachment system consists of a loading edge with a latch assembly and a guide ear on each side of the packer tailgate. The ears and latches will seat containers from one to ten cubic yards capacity. The standard container to be used with the New Way rear loader must have an ANSI Standard 1 ¼ - 1 ¾ diameter trunnion bar which is between 77 ½” and 78” end to end. This trunnion bar length will center the container between the ears and keep the container from moving sideways. The latch arms must be manually raised and secured by the arm latch. The container arms, when properly latched together with the guide ears, will fasten the container to the packer.

**Warning**

Only containers that meet the American National Standards Institute (ANSI) regulations should be used in conjunction with New Way Container Management systems.
General

There are other container management systems that can be mounted on your New Way rear loader. These would be needed because of the different sizes of refuse containers used in the refuse business such as residential one (1) yard containers on casters all the way up to ten (10) yard stationary commercial containers. Following are some terms that you should know that will be used in conjunction with the different containers available.

Hook

Winch

1. Control Lever
2. Engine Accelerator button
3. Container attachment
4. Hook
5. Cable
6. Winch assembly
7. Hook Breakaway
Reeving Cylinder System

1. Control lever
2. Engine accelerator button
3. Container attachment
4. Roller guide
5. Hook
6. Cable
7. Reeving Winch cylinder assembly

Container Kick Bar

1. Kick bar
2. Container Roller
3. Container attachment
Basic Operation

New Way container management systems have three steps to the operation procedure.

Attach

First, attach the container to the rear loader by latching it to the guide ears.

Dump

Next, the container is raised and its contents are emptied into the hopper.

Disconnect

After being emptied, the container is lowered to the ground, the latch arms are released and the truck is moved forward.
General

This section will provide you with all the necessary information that is needed to operate the New Way Packer properly. However, you should be familiar with all the information in Section 1, SAFETY PRECAUTIONS before you try to operate the unit.

Location Of Operating Controls
(Refer to pages 3-2 through 3-6)
Master Control Switch

Some chassis may be equipped with a master control switch that is located in the cab. This switch must be positioned in the start position to start the truck. The switch must be in the master power position to provide power to the PTO and accelerator circuits.

Pump/PTO control (1)

The Pump/PTO (Power Take-Off) starts the hydraulics when activated. The location of this control varies with the type of truck chassis. The way that it can be activated also varies such as with a rocker switch, lever, toggle lever, push-pull cable, or positive control button. Be sure to read all the safety decals for the Pump/PTO before attempting operation. Refer to PTO manufacturers manual for specific operation.

Master Accelerator On-Off

The Cab Accelerator On-Off switch enables the engine speed-up system, which speeds up the engine to supply more power to the hydraulic pump during operation of the hydraulic cylinders. Once again, the exact location varies with the make of the chassis, but is located somewhere on the cab control panel.
Tailgate “Ajar” Light (3)

This is a warning light that is located in the cab. This light will come on when the tailgate is ajar. Also, when the tailgate is ajar, an alarm will sound that is different from the backup alarm.

If the unit is put into operation with an illuminated or defective warning system, equipment damage or personal injury could occur.

Automatic Accelerator (4)

The automatic accelerator is activated when the slide control handle at the back of the body is engaged. The proximity switch for this operation is located by the top control rod on the rear valve.

Secondary Accelerator Switches (5)

The secondary accelerator switches will supply more power to the hydraulics by speeding up the engine. These momentary switches can be found on the rear right (passenger) side of the body and left front (drivers) side of the body. The operator needs to activate the closest switch when using the tailgate lift lever, kick bar lever or the pushout lever.
Front Control Valve (6)

The front control valve is mounted inside the driver-side front corner. These 2 control levers activate the raising of the tailgate and the ejection panel.

Tailgate Raise Lever (7)

The upper lever controls the tailgate. By pulling the upper lever handle the tailgate will unlock and raise.

Pull to Pack–Ejection Panel (8)

The lower lever controls the ejection panel. After the tailgate is raised, pull the lower lever to eject the load.
The driver alert momentary push button is located on the right (passenger) rear side. It is connected to a buzzer in the cab. When pressed by the operator, this buzzer signals the driver that the loading operation is completed.
DRIVING THE DIFFERENCE

SECTION 3
OPERATION

Owner’s/Operator’s Manual

Sweep and Slide Panel Levers (11)

The sweep and slide panel levers are the two upper levers located on the passenger side of the tailgate. Pull both of these levers out to start the pack cycle and push both handles in to complete the pack cycle. **To stop the pack cycle at anytime, manually place the handles in the neutral position.**

The operator must always check that the loading area is clear of any personnel and **verbally yell “CLEAR”,** before activating the Sweep and/or Slide Panel Levers.

The operator must remain alert and at the controls until the packing cycle is completed.

Container Handling Device Control Levers (12)

The optional container control levers are located on the passenger side of the tailgate. These levers are offset of the sweep and slide panel levers. Pulling the lever lifts the container. Pushing in the lever lowers the container.
Operating procedures

This section of the manual provides all the instructions necessary to start and operate the Cobra or Viper Packers.

Note
It is important that operators and mechanics understand and comply with these procedures.

Pre-Operation Inspection

Perform the following inspection every day before starting the unit.

1. Inspect all safety and operational decals, making sure they are legible, properly placed, and fully intact. In the case that decal replacements are necessary, call New Way at (800) 831-1858 to order free replacements (Refer to diagram on Page 1-10 thru 1-17)
2. Look for fluid leaks on and around the unit, valves, fittings, and hydraulic cylinders.
3. Check all mounting bolts, cylinder pins, and other fasteners for placement and tightness. Adjust or replace as necessary with the same grade and size.
4. Inspect visible welds and make sure there are no cracks or metal fatigue.
5. Make sure all cap screws and fasteners are tight.
6. Check all control levers for proper movement.
7. Check Hydraulic system for recommended oil level (manual shut-off valves are in open position) and inspect for leaks. If you need to add more fluid, be sure to use the proper type (See Section 5, SPECIFICATIONS).
NOTE

All hydraulic cylinders need to be in the retracted position to correctly check hydraulic fluid level.

8. All the following operating levers should be in the neutral position:
   a. Tailgate Raise Lever
   b. Push to Pack – Packer Panel Lever
   c. Sweep Panel
   d. Slide Panel

   CAUTION

Do not operate the Packer if any levers or system controls are damaged or removed. The unit must be repaired.

   WARNING

Never enter the body if the truck is running. Turn it off and put the keys in your pocket.

9. Inspect the sweep and slide panel area and clean out any refuse that might prevent correct operation.

10. Check the condition of the cables and hook safety latch on winch applications. Replace the cable if damage is evident.

11. Start the truck according to the manufacturer instructions. If truck is equipped with master control switch, position switch in start position.
Pre-Operation Inspection (cont.)

12. While engine is warming up, walk around the vehicle and check all of the lights. Replace burned out or missing bulbs.

The “tailgate ajar” warning light and alarm should be off. Do not operate the unit if the light is illuminated or alarm is sounding.

13. If truck is equipped with a master control switch, position switch in master power position. With the engine running, the transmission in neutral or park, the brakes applied, the speed-up solenoid switch ON and the PTO engaged, activate the “Accelerator On” switch on either the front drivers side or the rear passenger side of the body. You should hear the engine accelerate. Disengage that switch and activate the other one.

Never hold the sweep or slide panel levers in position by hand. Always engage and let go immediately.

14. Pull both the sweep and slide panel levers out. Check for the following:
   a. Engine acceleration. This should have been activated automatically when starting the sweep and slide panels.
   b. Observe the sweep and slide panels. The movement should be smooth and the panels should stop automatically at the “interrupted cycle” position.
   c. Push the sweep and slide panel levers in and let go. Observe the sweep and slide panels. The movement should be smooth and the panels should stop automatically at the “home” position.

15. Depress the driver signal push button located on the rear passenger side of the body and make sure that the alarm in the cab is working.

16. Put the transmission into “reverse” and back the unit up a few feet to make sure the back-up alarm sounds. (ensure camera system is working correctly if so equipped)

17. Set Emergency Brake and put the transmission into “neutral” or “park”, raise the tailgate about 6”, and check that the tailgate ajar light on the dash is on and that the tailgate ajar alarm sounds.

Do not operate the unit if it needs to be repaired or serviced.

18. If any problems are found with the unit report them to the maintenance supervisor and ensure they will be repaired. Also, take the keys out of the truck and, with a nonreusable fastener, attach a tag on the steering wheel stating that the unit is inoperable.
### DRIVING THE DIFFERENCE

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Inspector’s Signature: ________________________________________________

Date of Inspection: ____________________________

3-10
Hydraulic Engagement Procedures  
(Including Power Take-off and Engine driven pump)

Consult operating instruction before using (see driver’s sun visor)

Power Take-Off Operation
Vehicle Stationary:

Manual Transmission

1. A power take-off is, and should be operated as, an integral part of the main transmission.

2. Before shifting the power take-off into or out of gear, disengage the clutch and wait for transmission or P.T.O. gears to stop rotating.

Automatic Transmission with Manual Shift P.T.O.’s
Including Air Shift

On automatic transmissions, the gears in the transmission turn when the transmission is in neutral, therefore, gear clash will occur if the P.T.O. is shifted into gear at this time.

With Converter Driven Gear:

1. Shift transmission lever into any of the drive positions. This will stop transmission gear from turning.

2. Shift power take-off into gear.

3. Shift transmission into neutral. This will start transmission gear turning.

With Engine Driven Gear:

1. Shift P.T.O. into gear before starting engine. This procedure should help eliminate gear clash.

2. Start the engine using normal starting procedures as outlined in manufacturer’s operation manual.
Automatic Transmission with Power Shift P.T.O.’s Including Hot Shift

Engage the P.T.O. with the engine at idle speed. (See the transmission manufacturer’s instructions for special procedures.)

Operating Instructions For Rear Loader With Manual Control
1. Operator should familiarize themselves with the packer, component parts, and this manual!

2. Read the safety section of this manual and understand it before operating the equipment.

3. Set the emergency brake.
4. Open all shut off valves that are incorporated into the hydraulic system.

5. Start the engine and allow it to reach operating temperature.

6. In order to engage the hydraulic system, certain safety features are often employed. If your vehicle has:
   A. Emergency parking brake. - Set the brake.
   B. Air parking brake. - Set the brake.
   C. Standard shift transmission. - Shift into neutral.
   D. Automatic transmission with park function. - Shift into park.
   E. Automatic transmission without a park function. - Shift into neutral and set the brake.

Note: If your packer has Electric Override Safety Switches, the hydraulic system will not engage until these are activated.

7. Engage the hydraulic system that is incorporated into your particular unit by using the proper engagement procedures outlined on the driver’s sun visor or in your PTO instruction manual. You may also refer to the general Hydraulic Engagement Procedures and Precautions on page 3-11.

8. Allow the hydraulic fluid to reach operating temperature before continuing.
9. Turn on the accelerator toggle switch, which is located in the cab. (Up is ON, Down is OFF) An indicator lamp will light when turned on. The indicator lamp and switch are labeled “ACCEL”.

**Note:** The engine should not accelerate at this point. If acceleration does occur, one or more body switches have been activated. Ensure that the front accelerator (located between the cab and packer on the street side of unit) or the rear accelerator (located on the curbside rear) are not stuck in the on position. These are momentary switches and need to be replaced immediately if malfunctioning. Ensure that the sweep/slide are not in the position to engage the automatic proximity switch speed up.

10. Make sure the tailgate is fully locked. A visual inspection of the lock should be made at this time.

11. The ejection panel should be positioned at the rear of the body. The ejection control lever is located at the front of the unit on the street side inside the access door.

![CAUTION]

**Do not confuse packer panel and tailgate control levers!**

12. To load the hopper the sweep panel must be in the “close” position, and the slide panel must be in the “pack” position.

![CAUTION]

Two upper levers are used to control the sweep and slide function. They are located on the passenger side of the tailgate. A decal placed near this lever will show the correct operation.
13. Load the hopper with refuse by:
   A. Hand.
   B. Hydraulic kick bar container lift. Refer to the hydraulic kick bar container lift instructions on page 3-21.
   C. European kick bar container lift. Refer to the European lift instructions on page 3-22.
   D. Winch. Refer to the winch instructions on page 3-22.
   E. Hydraulic cart and/or barrel flipper. Refer to the owner’s manual of the original equipment manufacturer.
   F. Reieving cylinder container lift. Refer to the reieving system instructions on page 3-24.

14. To pack and clear refuse from the hopper, grasp the control lever:
   A. Operate the lever to the “open” position.
   B. Operate the lever to the “down” position.
   C. Operate lever to the “close” position. This will sweep the hopper of refuse.
   D. Operate the lever to the “pack” position.

Use caution when compacting glass or any items that may burst or shatter and cause eye injury.

15. The back-pack valve regulates automatic movement of the ejection panel to achieve proper load density (compaction) of refuse. For adjustment:

   Step 1: Determine the weight of the load at the dump site scales. This is an indication of load density.

   Step 2: Adjust the relief cartridge to set the load density as follows:
   a. Remove the locking pin, and unlatch and open the side access door.
   b. Hold the adjustment screw and loosen the lock nut.
   c. Turn the adjustment screw 1/4th turn clockwise to increase the load density and counterclockwise to decrease load density. (DO NOT turn adjustment screw too far clockwise as this will cause the ejection panel to stall and not move forward automatically in response to packing additional refuse.)
   d. Hold the adjustment screw and tighten the lock nut.
   e. Close and latch the side access door and reinstall the locking pin.

   Step 3: Determine the weight of the next load at the dump site scales to measure the change in the load density.

   Step 4: Repeat this process until the desired result is achieved.
16. If the ejection panel can no longer be moved forward in the body, the body is full and must be transported to a landfill for ejection.

17. Before traveling to a landfill, place the tailgate panels in a down position to prevent refuse from blowing out of the packer while traveling.

18. Turn off the cab accelerator switch.

19. Disengage the hydraulic system.

20. To unload:
   A. Set the emergency brakes.
   B. Engage the hydraulic system.
   C. Turn on the accelerator cab switch.
   D. Cycle the sweep panel to the pack position to clear the hopper before raising the tailgate.
   E. Turn on the secondary accelerator switch which is located on the side of the front body frame between the body and the cab on the driver’s side.
   F. To unlock and raise the tailgate:
      1. Unpin and pull the top lever on the front valve inside the access door on front street side of the packer.
      2. This will cause the cylinders to disengage the lock and raise the tailgate.
      3. Release the valve handle after the tailgate is raised to its highest position.
   G. **CAUTION:** Be sure all refuse has fallen out of the raised tailgate before ejecting the load. Failure to do so could cause a shift of the center of gravity, and a dangerous situation could result.
   H. To eject the load, pull the lower handle on the front valve inside the access door. The load will then be ejected.
   I. Turn off all of the secondary accelerator switches.
   J. Slowly drive forward until the tailgate will clear the ejected refuse when lowered.
   K. Lower the tailgate by pushing on the front valve tailgate handle, and utilize the tailgate props as instructed on safety decal or as shown in video. (refer to sticker 2 page 1-11)
   L. Clear off any refuse that may be lodged on the tailgate seal. Use a suitable tool that will allow you to stand clear of the tailgate such as a broom.
DO NOT STAND OR CROSS UNDER A RAISED TAILGATE!

M. Completely close and lock the tailgate by continuing to push on top valve (tailgate) handle until you can hear the hydraulic system relief bypass.
N. Visually check the lock mechanism for a complete lock.

21. Turn off any accelerator switches and disengage the hydraulic system before driving the unit any further.

IF YOU HAVE ANY ADDITIONAL QUESTIONS,
CALL OUR CUSTOMER SERVICE DEPARTMENT AT (800) 831-1858.
Operating Instructions for Rear Loader With Semi-Automatic Control

1. Operator should familiarize themselves with the packer, component parts, and this manual!

2. Read the safety section of this manual and understand it before operating the equipment.

3. Set the emergency brake and shift to park or neutral.

4. Open all shut off valves that are incorporated into the hydraulic system.

5. Start the engine and allow it to reach operating temperature.

6. In order to engage the hydraulic system, certain safety features are often employed.

   If your vehicle has:
   A. Emergency parking brake. - Set the brake.
   B. Air parking brake. - Set the brake.
   C. Standard shift transmission. - Shift into neutral.
   D. Automatic transmission with park function. - Shift into park.
   E. Automatic transmission without a park function. - Shift into neutral and set the brake.

   **Note:** If your packer has Electric Override Safety Switches, the hydraulic system will not engage until these are activated.

7. Engage the hydraulic system that is incorporated into your particular unit by using the proper engagement procedures outlined on the driver’s sunvisor or in your PTO instruction manual. You may also refer to the general Hydraulic Engagement Procedures and Precautions on pages 3-11.

8. Allow the hydraulic fluid to reach operating temperature before continuing.

9. Turn on the accelerator toggle switch that is located in the cab. (Up is ON, Down is OFF). An indicator lamp will light when turned on. The indicator lamp and switch are labeled “ACCEL”.

   **Note:** The engine should not accelerate at this point. If acceleration does occur, one or more body switches have been activated. Ensure that the front accelerator (located between the cab and packer on the street side of unit) or the rear accelerator (located on the curbside rear) are not stuck in the on position. These are momentary switches and need to be replaced immediately if malfunctioning. Ensure that the sweep/slide are not in the position to engage the automatic proximity switch speed up.

10. Make sure the tailgate is fully locked.
11. The ejection panel should be positioned at the rear of the body. The ejection control lever is located at the front of the unit inside the access door on street side of unit.

Do not confuse eject-panel and tailgate control levers!

12. To load the hopper the sweep panel must be in the “close” position, and the slide panel must be in the “pack” position.

Two upper levers are used to control the sweep and slide function. They are located on the passenger side of the tailgate. A decal placed near these levers will show the correct operation (OPEN, DOWN, CLOSE, and PACK).
Operating Instructions for Rear Loader With Semi-Automatic Control (continued)

13. Load the hopper with refuse by:
   A. Hand.
   B. Hydraulic kick bar container lift. Refer to the hydraulic kick bar container lift instructions on page 3-21.
   C. European kick bar container lift. Refer to the European lift instructions on page 3-22.
   D. Winch. Refer to the winch instructions on page 3-22.
   E. Hydraulic cart and/or barrel flipper. Refer to the owner’s manual of the original equipment manufacturer.
   F. Receiving cylinder container lift. Refer to the receiving system instructions on page 3-24.

14. To pack and clear refuse from the hopper, grasp the control lever:
   A. Operate the lever to the “open” position.
   B. Operate the lever to the “down” position.
   C. Operate lever to the “close” position. This will sweep the hopper of refuse.
   D. Operate the lever to the “pack” position.

Use caution when compacting glass or any items that may burst or shatter and cause eye injury.

15. The back-pack valve regulates automatic movement of the ejection panel to achieve proper load density (compaction) of refuse. For adjustment:

Step 1: Determine the weight of the load at the dump site scales. This is an indication of load density.

Step 2: Adjust the relief cartridge to set the load density as follows:
   a. Remove the locking pin, and unlatch and open the side access door.
   b. Hold the adjustment screw and loosen the lock nut.
   c. Turn the adjustment screw 1/4th turn clockwise to increase the load density and counterclockwise to decrease load density. (DO NOT turn adjustment screw too far clockwise as this will cause the ejection panel to stall and not move forward automatically in response to packing additional refuse.)
   d. Hold the adjustment screw and tighten the lock nut.
   e. Close and latch the side access door and reinstall the locking pin.

Step 3: Determine the weight of the next load at the dump site scales to measure the change in the load density.

Step 4: Repeat this process until the desired result is achieved.
16. If the ejection panel can no longer be moved forward in the body, the body is full and must be transported to a landfill for ejection.

17. Before traveling to a landfill, place the tailgate panels in a down position to prevent refuse from blowing out of the packer while traveling.

18. Turn off the cab accelerator switch.

19. Disengage the hydraulic system.

20. To unload:
   A. Set the emergency brakes.
   B. Engage the hydraulic system.
   C. Turn on the accelerator cab switch.
   D. Cycle the sweep panel to the pack position to clear the hopper before raising the tailgate.
   E. Turn on the secondary accelerator switch which is located on the side of the front body frame between the body and the cab on the driver’s side.
   F. To unlock and raise the tailgate:
      1. Unpin and pull the top lever on the front valve inside the access door on front street side of the packer.
      2. This will cause the cylinders to disengage the lock and raise the tailgate.
      3. Release the valve handle after the tailgate is raised to its highest position.
   G. **CAUTION:** Be sure all refuse has fallen out of the raised tailgate before ejecting the load. Failure to do so could cause a shift of the center of gravity, and a dangerous situation could result.
   H. To eject the load, pull the lower handle on the front valve inside the access door. The load will then be ejected.
   I. Turn off all of the secondary accelerator switches.
   J. Slowly drive forward until the tailgate will clear the ejected refuse when lowered.
   K. Lower the tailgate by pushing on the front valve tailgate handle, and utilize the tailgate props as instructed on safety decal or as shown in video. (refer to sticker 2 page 1-11)
   L. Clear off any refuse that may be lodged on the tailgate seal. Use a suitable tool that will allow you to stand clear of the tailgate such as a broom.

   **DO NOT STAND OR CROSS UNDER A RAISED TAILGATE!**

   M. Completely close and lock the tailgate by continuing to push on top valve (tailgate) handle until you can hear the hydraulic system relief bypass.
   N. Visually check the lock mechanism for a complete lock.

21. Turn off any accelerator switches and disengage the hydraulic system before driving the unit any further.

IF YOU HAVE ANY ADDITIONAL QUESTIONS, CALL OUR CUSTOMER SERVICE DEPARTMENT AT (800) 831-1858.
Operating Instructions for Options:

Hydraulic Kick Bar Container Lift

1. Push in on the vertical container latch arm.

2. Raise the horizontal arm lock. Pivot the container latch arm down, and position the container trunion bar into latch slot.

3. Raise the latch arm up and lock it into place with the arm lock.

**NOTE:** There are two pivoting retainer latches built into the container latch arm. Unpin them and allow them to pivot freely.

4. With the hydraulic system engaged, grasp the RED “Kick Bar” lift control lever located at the rear of the packer on the passenger side labeled “KICK BAR - UP - DOWN”. STAND CLEAR of the container and lift arms, and operate the lift lever to the “up” position. The container will rise and tip for dumping into the packer hopper. Release the lift lever to stop the container at any desired point. Operate the packing control levers as previously described to clear refuse from the hopper.

5. After the container is empty, grasp the RED “Kick Bar” control lever and operate it to the “down” position. Stop the lift’s downward motion when the container contacts the working surface and insert the pins into the left and right lower pivoting retainer latches.

6. Again operate the “Kick Bar” lever to the “down” position until the kick bar is in its original position below the bumper. Now remove the empty container from the trunion slots, and relatch the latch arms before traveling to the next stop.
European Kick Bar Container Lift

1. Engage the hydraulic system as previously described.

2. Grasp the RED lift control lever located at the rear of the packer on the passenger side labeled “KICK BAR - UP - DOWN”. STAND CLEAR of the lift arms, and operate the control lever to the “up” position. Stop control lever operation when the kick bar clears bottom of bumper.

3. Grasp the European fold down arms, and lift upward to pivot into spring loaded open position. Position the European container trunions into the trunion receivers.

4. Use the RED “Kick Bar” control lever to raise and dump the container.

5. After the hopper is cleared, and the container is empty, lower the container to the working surface by operating the lever to the “down” position.

6. Remove the European container.

7. Lower the trunion receivers to the kick bar, and lower the kick bar to its original position under the bumper before traveling to the next stop.

Winch

1. Push in on the vertical container latch arm.

2. Raise the horizontal arm lock.

3. Pivot the container latch arm down, and position the container trunion bar into the latch slot.

4. Raise the latch arm up and lock it into place with the
5. Engage the hydraulic system.

6. Grasp the RED control lever located on the passenger side of the tailgate labeled “WINCH - UP - DOWN”. Operate the control lever to the “down” position while pulling on slip hook and cable.

**WARNING**

It is not recommended to use the accelerator when spooling out cable or lowering a container.

7. When the cable and hook are extended far enough to connect to the proper area on container, position the control lever into neutral to stop the cable movement.

8. Attach the slip hook to the container. For safety, STAND CLEAR of the container while it is in the dumping process. The accelerator may be used for raising the container if desired.

9. Grasp the Red winch control lever and operate it to the “up” position. When the container reaches the desired height, but before hitting the container stops, release the control lever to neutral.

10. Operate the packing control levers as previously described to clear refuse from the hopper. After the container is empty, operate the winch control lever to the “down” position until the container reaches the working surface, and there is sufficient slack in the cable. Return the control lever to neutral.

11. Remove the cable hook from the container. Disconnect the container from the trunion locks. Hold the cablehook and take up the slack in cable before moving vehicle.

12. Disengage hydraulic system.
Reeving System Container Lift

1. Push in on the vertical container latch arm.

2. Raise the horizontal arm lock.

3. Pivot the container latch arm down, and position the container trunion bar into the latch slot.

4. Raise the latch arm up and lock it into place with the arm lock.

5. Engage the hydraulic system.

6. Grasp the RED control lever located on the passenger side of the tailgate labeled “WINCH - UP - DOWN”. Operate the control lever to the “down” position while pulling on the slip hook and cable. When the hook and cable are extended far enough to connect to the proper area on the container, operate the control lever to the neutral position to stop the cable movement.

7. Attach the slip hook to the container, and STAND CLEAR of the container while in the dumping process.

8. Grasp the Red winch control lever, and operate it to the “up” position. When the container reaches the desired height, but before hitting the container stops, release the control lever and allow it to return to neutral.

9. Operating the packing control levers to clear the refuse from the hopper. After the container is empty, operate the Red winch control lever to the “down” position until the container reaches the working surface. Return the control lever to neutral.

10. Remove the cable hook from the container. Disconnect the container from the trunion locks. Keep tension on the cable when operating the control lever in the “up” or “down” positions.

\textbf{NOTE:} Failure to keep tension on the cable may allow the cable to become wedged between the pulleys in the reeving system, and damage may occur to the cable.

11. Take up the slack in the cable and connect the hook to suitable location before traveling to the next stop.

\textbf{IF YOU HAVE ANY ADDITIONAL QUESTIONS,}
\textbf{CALL OUR CUSTOMER SERVICE DEPARTMENT AT (800) 831-1858.}
Proper repair and servicing is important to keep your Packer operating at peak efficiency. Following are effective methods for performing these procedures. Some of these procedures require special tools. Using improper tools can be dangerous to the person using them. Any questions about the proper usage of tools should be handled by calling New Way. Any modifications to equipment must be done in accordance with American National Standards Institute Z245.1-2007. Deviating from these standards could cause damage to the user and operators.

Safety Precautions to be taken before performing any service or repair

Lock Out-Tag Out Procedure

Always wear safety glasses.

Lock out procedure! (To render safe and isolate all energy sources.)

A. Shut down all power sources.

1. Turn off the truck engine, and remove the ignition keys.

2. Turn off any auxiliary engines, and remove the ignition keys.

3. Turn off the electric engine, and turn off the power panel. Also turn off the main breaker. Lock out the power panel and main breaker. Remove keys!

4. If equipped with a lockable battery shutoff, lock in off position.

ALL KEYS MUST BE PLACED IN YOUR POCKET!
NO OTHER KEYS SHOULD BE AVAILABLE TO ANY OTHER PERSONNEL!
(If more than one set of keys exists for your vehicle get all sets and place them in your pocket!)
B. Hydraulic Disengagement procedures: NOTE: Power take-off:

1. **Manual Transmission with Wire Shift PTO and Cable Control** - Disengage clutch and with Engine Off or at Idle, push in on the PTO shift control. PTO will disengage and indicator lamp will go out.

2. **Automatic Transmission with Wire Shift PTO and Cable Control** - With Engine Off, push in on the PTO shift control. PTO will disengage and indicator lamp will go out.

3. **Automatic Transmission with Air Shift PTO** - With Engine Off or at Idle, lift up Lock button and shift control to the out position. PTO will disengage and indicator lamp will go out.

4. **Automatic Transmission with Electric Over Air Shift PTO** - With Ignition Switch to ON, and Engine Off or at Idle, Push dash control rocker switch to Off position. PTO will disengage and indicator lamp will go out.

5. **Automatic Transmission with Electric Shift PTO** - With Ignition Switch to ON, and Engine Off or at Idle, Push dash control rocker switch to Off position. PTO will disengage and indicator lamp will go out.

C. Remove all keys from engines, trucks and electric device switches!

**Lock Out-Tag Out Procedure**

(continued)

D. Install Tag on steering wheel with non reusable fastener.

Example of a Lockout Tag:

<table>
<thead>
<tr>
<th>(DANGER)</th>
<th>EQUIPMENT</th>
<th>LOCKED OUT BY:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dept:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4-2
E. Place Equipment in NON-Free fall Positions.

1. Raised tailgates should be lowered, either under power or by gravity. To achieve this, operate the appropriate tailgate control in a correct manner.

F. Placing Extra Blocking Devices.

1. Raised tailgates may be blocked in raised position by first securing wheels on the road surface with wheel chocks, front and rear, on at least two wheels. This is to prevent truck movement. Whenever possible, use the installed tailgate props that are installed on the tailgate by following the operation decal. When this is not possible, safely block up any tailgate, movable assembly or part, with carefully stacked and nailed 4” x 4” lumber or 6” x 6” lumber. Check the blocking for steadfastness. Carefully lower the weight of the tailgate onto the beams. Test the chocks and tailgate props, or the beams for steadfastness before placing yourself in a potentially dangerous situation.

G. Relieving Stored Hydraulic Pressure in all cylinders only when hydraulic maintenance is to be performed.

1. All Telescoping hydraulic cylinders used only in conjunction with a packing panel and or ejection panel.
   a. Open all shutoff valves incorporated into your particular unit.
   b. With lockout-tag out in process, operate the appropriate valve control handle in both forward and reverse direction and hold momentarily in both positions.
   c. Close all shutoff valves incorporated into your particular unit.
   d. Loosen the hydraulic fittings to the hydraulic telescoping cylinder at a point of attachment away from the cylinder to be worked upon. Check for any leakage of fluid under residual pressure.
   e. After residual pressure has been relieved, tighten the previously loosened fittings and proceed to work as normal on this particular cylinder.

2. Double acting single stage cylinders which hold close a tailgate. **NOTE:** These cylinders incorporate a SAFETY PILOT CHECK VALVE located at the front valve body. **NOTICE** The lower port on these cylinders always have high pressure applied!
   a. Open all shutoff valves incorporated into your particular unit.
   b. Secure vehicle to road surface with wheel chocks placed front and rear on at least two wheels. Test wheel chocks for steadfastness.
   c. Lower the tailgate if at all possible, by operating the appropriate control handle.
   d. If tailgate can not be lowered, use appropriate supports as specified previously in Section F (Placing Extra Blocking Devices).
   e. After tailgate is lowered or securely supported, operate the appropriate valve control in both positions and hold momentarily in both.
Lock Out-Tag Out Procedure (continued)

f. DANGER** Loosen Slowly and Carefully the “lower” hydraulic fitting to this cylinder or cylinders. Watch out for leakage of fluid under residual high pressure. Close all shut off valves incorporated into your particular unit.

g. After residual pressure is removed from hose lines, tighten the loosened fittings.

h. You have now relieved the stored hydraulic pressure inside of the cylinders to be worked on! You may now proceed as normal unless power is reapplied to hydraulic system. If power is reapplied, Restart the Entire Process.

3. Double acting single stage cylinders which support a load or are used in conjunction with a packing or ejection panel:

a. Open all shut off valves incorporated into your particular unit’s hydraulic system.

b. Operate the particular valve control lever for the appropriate cylinder. Operate in both directions and hold the positions momentarily to relieve pressure.

c. Secure the vehicle to the road surface with wheel chocks placed in front and behind at least two wheels. Test the wheel chocks for steadfastness.

d. Safely block up any movable assembly, or part, with carefully stacked and nailed 4" x 4" lumber or 6" x 6" lumber. Check the blocking for steadfastness.

e. Close all shutoff valves incorporated into your unit.

f. Loosen the hydraulic fittings to this cylinder or cylinders at a point of attachment away from the cylinder to be worked on. Check for leakage of fluid under residual pressure.

g. After residual pressure is removed from the hose lines, tighten the loosened fittings. Proceed to work as normal on this particular cylinder.
TAP-N-KIT SETTINGS

If the unit has Tap-N-Kit, set flipper for 10 seconds. With Tap-N-Kit (Back pressure under 200 PSI). Set the pressure at the handle to 2000 PSI.

Check cycle time (26-30 seconds).

Set the Main pressure at 2300 PSI for Cobras 16RL and above and 2200 PSI for Vipers with the slide in the up position.

Set the Rear main to 2000 PSI with slide up.

Check cycle time (26-30 seconds)
Follow the following procedures to adjust:
MAIN RELIEF SETTING: 2300 PSI @ 29GPM for large Cobras (16,18 and 20 yard)
2000 PSI @ 29GPM for Cobras (9,12.6,25)
2200 PSI @ 25GPM for all Vipers except the Super Viper (25 yard) which is 2500 PSI @ 29GPM
2500 PSI @ 29GPM for Cobras (11,13,16 low profile)

1. Accelerate the engine using the secondary accelerator switch above the control handles at the front of the packer.

2. Push and maintain inward force on the tailgate lever and observe the pressure on the gauge.

3. For optimum performance, safety and durability the pressure should be set as indicated above.

4. If an adjustment is needed, use a 9/16” combination wrench to loosen the jam nut on the adjust-
ment valve and use a 5/32” hex Allen wrench to adjust the pressure in 1/8 turn increments. (clock-
wise to increase pressure and counterclockwise to decrease the pressure.

5. Tighten jam nut and recheck the pressure. Repeat processes 1-5 as required.

THE EJECTION PANEL RELIEF is set at the factory and is not intended to be adjusted. If the relief is not working properly it may need to be cleaned or replaced.
Only trained personnel should conduct adjustments to the hydraulic system pressures. Hydraulic pressures set above the stated settings may cause damage to the equipment and/or personal injury.

Note: Oil viscosity and flow rates will cause variations in the relief pressure.
Only trained personnel should conduct adjustments to the hydraulic system pressures. Hydraulic pressures set above the stated settings may cause damage to the equipment and/or personal injury.

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Only trained personnel should conduct adjustments to the hydraulic system pressures. Hydraulic pressures set above the stated settings may cause damage to the equipment and/or personal injury.

**Setting the Main Relief**

Note: This relief cartridge provides maximum system pressure for the front and rear control valves of the packer body. Oil viscosity and flow rates will cause variations in the relief pressure.
Adjusting sweep and slide detents (kick out pressures)

Step 1. Remove the protective cover using a 1/2” combination wrench or socket.

Step 2. Remove the rubber grommets from the slide and sweep valve sections.

Step 3. Bottom out the adjustment screws as follows (do not force past bottomed out):
   A. For cobra packers turn adjustment screws clockwise using a flat blade screwdriver.
   B. For the Viper packers hold the adjustment screws with 3/32” hex Allen wrench and loosen the jam nut. Turn adjustment screws clockwise with the Allen wrench. This is best accomplished using the tool shown below.

   PART # 113416

Step 4. Push both the slide and sweep levers toward the packer and release them immediately. When the slide and sweep panels stop the engine will lug down as the valves are bottomed out.

Step 5. Slowly back out the adjustment screw in the slide valve section until the lever returns to neutral (kicks out). For the Viper hold the adjustment screw in position until the jam nut is retighten.

Step 6. Follow the same procedure with the sweep valve section.

Step 7. Pull both the slide and sweep handles out and wait for them to cycle. When they stop the handles should kick out to neutral.

Step 8. Repeat this procedure until the handle kick out to neutral when ever the panels reach the end of their stroke.

Step 9. Back each adjustment screw and additional 1/16 to 1/8 turn. Remember on the Viper to hold the adjustment screw while tightening or loosening the jam nuts.

Step 10. Reinstall the protective rubber grommets and the valve protective cover.
Adjustment of the Rear Valve Main Relief Pressure (large Cobra 16, 18, 20 and 25 Yard Packers)

Step 1. Two technicians are required for this operation. While one watches the pressure gauge at the front valve, the other holds the slide panel lever to bottom out the cylinders. Pressure should read 2000 PSI.

Step 2. Hold the adjustment screw with a 1/4” hex Allen wrench while loosening the jam nut with a 1 1/8” combination wrench.

Step 3. Turn the adjustment screw 1/4 turn (clockwise to increase and counter clockwise to decrease pressure).

Step 4. Hold the adjustment screw in position while retightening the jam nut.

Step 5. Bottom out the slide panel cylinders and recheck pressure.

Step 6. Repeat the adjustment procedures until pressure is set at 2000 PSI.
The 7cr2 relief valve has a 1/32” hole drilled into the valve where the oils is returned to the valve. The oil flows into this hole and slowly lowers the pressure on the ejection panel cylinders. The oil passes to a 1/8” hole that is drilled in the return to tank section of the valve allowing the oil to return to the tank when the set pressure is reached.
BACK-PACK VALVE ADJUSTMENT

NOTE: Back-pack valve regulates automatic movement of the ejection panel to achieve proper load density (compaction) of refuse.

Step 1: Determine the weight of the load at the dump site scales. This is an indication of load density.

Step 2: Adjust the relief cartridge to set the load density as follows:

a. Remove the locking pin, and unlatch and open the side access door.
b. Hold the adjustment screw and loosen the lock nut.
c. Turn the adjustment screw 1/4th turn clockwise to increase the load density and counterclockwise to decrease load density. (DO NOT turn adjustment screw too far clockwise as this will cause the ejection panel to stall and not move forward automatically in response to packing additional refuse.)

d. Hold the adjustment screw and tighten the lock nut.
e. Close and latch the side access door and reinstall the locking pin.

Step 3: Determine the weight of the next load at the dump site scales to measure the change in the load density.

Step 4: Repeat this process until the desired result is achieved.
HYDRAULIC SYSTEM MAINTENANCE

DAILY CHECK OF OPERATING TEMPERATURE (APPROX 35 DEGREES F) AND THE PROPER LEVEL AS SHOWN.

This level would be with the ejection panel full forward with the cylinders fully retracted, the tailgate closed and locked, the sweep rolled open(cylinders closed) and the slide in the full down position.

Check that the breather is clean and free of obstruction. (Replace this breather part # 106229 every 6 months.)
Only trained personnel should conduct adjustments to the hydraulic system pressures. Hydraulic pressures set above the stated settings may cause damage to the equipment and/or personal injury.
Follow the following procedures to adjust:

**BACK PACK VALVE: 1950 PSI**

1. To adjust the Back Pack Valve, the body needs to be 1/3 to 1/2 loaded with garbage.

2. Using the secondary accelerator button above the control handles on the front of the unit, accelerate the engine and push to pack the ejection panel into the garbage until the panel stops moving and all oil is going over the relief to the tank.

3. Release the lever to the neutral position. The ejection panel should remain in position.

4. If the ejection panel immediately drifts forward, the Back Pack Cartridge maybe stuck in the open position. If drift occurs the Back Pack Valve will need cleaned or replaced.

5. If no drift occurs, immediately load additional refuse into the hopper until full.

6. While an operator is cycling the rear packing mechanism, watch the front pressure gauge and the ejection panel position.

7. As the slide cylinders extend forcing the refuse into the body cavity, the pressure should rise to approximately 2400 PSI. At that pressure the Back Pack Valve will receive a pilot signal to open allowing the ejection panel to drift forward. The panel should continue to retract until the pressure lowers to 2150 - 2200 PSI. If the panel drifts forward below 2400 PSI or the pressure goes beyond 2400 PSI before the panel starts to drift, the Back Pack Cartridge needs adjustment.

8. If an adjustment is required follow proper shut down and Lock-out/Tag-out procedures before entering body.

9. To adjust the cartridge loosen the jam-nut on the sequence cartridge using a 11/16” wrench.

10. Rotate the adjustment screw with a 3/16” hex allen wrench in 1/8 turn increments. (clockwise to increase pressure) (counter clockwise ot decrease pressure)

11. Repeat 4 through 10 as required. When the pressure is properly set, tighten the jam-nut and recheck the setting.
The return filter should be changed initially after 50 hours of use and should be changed every 250 hours thereafter. Order part #109880. Using a 1/2” combination wrench or socket, loosen and remove the six cap screws and remove the cover and spring. Lift the bypass valve and the filter out and replace with the new filter. Replace the bypass valve and the spring and cover.

The suction strainer (part #106231) should be cleaned when the hydraulic fluid is changed. Initially clean this strainer at six months and then yearly thereafter when hydraulic fluid is being changed. With an 18mm combination wrench loosen the cover and remove the cover, disc and seal assembly. Pry off the clip and remove the strainer. Clean with mineral spirits and allow to dry before reassembling.
### CAPSCREW MARKING AND TORQUE VALUES

<table>
<thead>
<tr>
<th>Usage</th>
<th>Much Used</th>
<th>Used at Times</th>
<th>Used at Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capscrew Diameter &amp; Minimum Tensile Strength PSI</td>
<td>To 3/4 - 120,000</td>
<td>To 5/8 - 140,000</td>
<td>150,000</td>
</tr>
<tr>
<td></td>
<td>To 1 - 115,000</td>
<td>To 3/4 - 133,000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quality of Material</th>
<th>Min. Commercial</th>
<th>Med. Commercial</th>
<th>Best Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAE Grade Number</td>
<td>5</td>
<td>6 or 7</td>
<td>8</td>
</tr>
</tbody>
</table>

**CAPSCREW HEAD MARKINGS**
Manufacturer’s marks may vary.
These are all SAE Grade 5 (3-line.)

<table>
<thead>
<tr>
<th>Capscrew Body Size (Inches) - (Thread)</th>
<th>Torque Ft-Lb (kg m)</th>
<th>Torque Ft-Lb (kg m)</th>
<th>Torque Ft-Lb (kg m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4 - 20</td>
<td>8 (1.11)</td>
<td>10 (1.38)</td>
<td>12 (1.66)</td>
</tr>
<tr>
<td>- 28</td>
<td>10 (1.38)</td>
<td></td>
<td>14 (1.94)</td>
</tr>
<tr>
<td>5/16 - 18</td>
<td>17 (2.35)</td>
<td>19 (2.63)</td>
<td>24 (3.32)</td>
</tr>
<tr>
<td>- 24</td>
<td>19 (2.63)</td>
<td></td>
<td>27 (3.73)</td>
</tr>
<tr>
<td>3/8 - 16</td>
<td>31 (4.29)</td>
<td>34 (4.70)</td>
<td>44 (6.09)</td>
</tr>
<tr>
<td>- 24</td>
<td>35 (4.84)</td>
<td></td>
<td>49 (6.78)</td>
</tr>
<tr>
<td>7/16 - 14</td>
<td>49 (6.76)</td>
<td>55 (7.61)</td>
<td>70 (9.68)</td>
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<tr>
<td>- 20</td>
<td>55 (7.61)</td>
<td></td>
<td>78 (10.79)</td>
</tr>
<tr>
<td>1/2 - 13</td>
<td>75 (10.37)</td>
<td>85 (11.76)</td>
<td>105 (14.52)</td>
</tr>
<tr>
<td>- 20</td>
<td>85 (11.76)</td>
<td></td>
<td>120 (16.60)</td>
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<tr>
<td>9/16 - 12</td>
<td>110 (15.21)</td>
<td>120 (16.60)</td>
<td>155 (21.44)</td>
</tr>
<tr>
<td>- 18</td>
<td>120 (16.60)</td>
<td></td>
<td>170 (23.51)</td>
</tr>
<tr>
<td>5/8 - 11</td>
<td>150 (20.75)</td>
<td>167 (23.10)</td>
<td>210 (29.04)</td>
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<tr>
<td>- 18</td>
<td>170 (23.51)</td>
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<td>240 (33.19)</td>
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<td>3/4 - 10</td>
<td>270 (37.34)</td>
<td>280 (38.72)</td>
<td>375 (51.86)</td>
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<tr>
<td>- 16</td>
<td>295 (40.80)</td>
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<td>420 (58.09)</td>
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<tr>
<td>7/8 - 9</td>
<td>395 (54.63)</td>
<td>440 (60.85)</td>
<td>605 (83.67)</td>
</tr>
<tr>
<td>- 14</td>
<td>435 (60.16)</td>
<td></td>
<td>675 (93.35)</td>
</tr>
<tr>
<td>1 - 8</td>
<td>590 (81.60)</td>
<td>660 (91.28)</td>
<td>910 (125.85)</td>
</tr>
<tr>
<td>- 14</td>
<td>660 (91.28)</td>
<td></td>
<td>990 (136.92)</td>
</tr>
</tbody>
</table>

**NOTES:**
1. Always use the torque values listed above when specific torque values are not available.
2. The above is based on use of clean, dry threads.
3. Reduce torque by 10% when engine oil is used as a lubricant.
4. Reduce torque by 20% if new plated capscrews are used.
5. General Formula for calculating Torques is as follows: Torque in inch Lbs. = .2 x Normal Diameter of Screw x Loads in Lbs., where Load = 80% of Yield Strength, expressed in Lbs., not pounds per square inch.
PACKER TO CONTROL BOX WIRING GUIDE

12-PIN GRAY (BODY)

<table>
<thead>
<tr>
<th>WIRE #</th>
<th>PIN #</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>FOR USE WITH REVERSE WORK LIGHTS: BLACK 16AWG</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>RUNNING LIGHTS: BROWN 16AWG</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>LEFT TURN: YELLOW 16AWG</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>RIGHT TURN: GREEN 16AWG</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>POWER TO ACCELERATOR AND TAILGATE AJAR: +12V</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>SWITCHED ACCELERATOR FROM BODY ACCELERATOR RELAY PIN #86</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>BRAKE LIGHTS: RED 16AWG</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>REVERSE LIGHTS: BLACK 16AWG</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
<td>OUTSIDE WORK LIGHTS (OPTION) [PIN 30 ON OUTSIDE WORKLIGHT RELAY]</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>FROM TAILGATE AJAR ALARMLIGHT</td>
</tr>
<tr>
<td>11</td>
<td>11</td>
<td>FROM DRIVER ALERT SWITCH</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
<td>HOPPER WORK LIGHTS: WHITE/BLACK 14AWG</td>
</tr>
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</table>

8-PIN GRAY (BODY)

<table>
<thead>
<tr>
<th>WIRE #</th>
<th>PIN #</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>1</td>
<td>STROBE LIGHT: 16AWG</td>
</tr>
<tr>
<td>14</td>
<td>2</td>
<td>LED FLASHER</td>
</tr>
<tr>
<td>15</td>
<td>3</td>
<td>FRONT PTO KILL: WHITE</td>
</tr>
<tr>
<td>16</td>
<td>4</td>
<td>GROUND</td>
</tr>
<tr>
<td>17</td>
<td>5</td>
<td>GROUND</td>
</tr>
<tr>
<td>18</td>
<td>6</td>
<td>FRONT PTO KILL: BLACK</td>
</tr>
<tr>
<td>19</td>
<td>7</td>
<td>(SPARE)</td>
</tr>
<tr>
<td>20</td>
<td>8</td>
<td>BODY PTO KILL: SWITCH TO PTO BLOCK</td>
</tr>
</tbody>
</table>

BLUE GROTE PLUG

WHITE: GROUND BOLT
BLACK: FRONT BODY ACCELERATOR IS SAME AS PIN 6 OF 12 PIN GRAY PLUG
RED: FRONT STROBE
BLUE: +12V POWER TO FRONT ACCELERATOR
BROWN: RUNNING LIGHTS
YELLOW: MID BODY LEFT TURN
GREEN: MID BODY RIGHT TURN
SECTION 4
GENERAL REPAIR

Owner’s/Operator’s Manual
COBRA - VIPER

DRIVING THE DIFFERENCE

12-PIN BLACK (CAB CONSOLE)

<table>
<thead>
<tr>
<th>WIRE #</th>
<th>PIN #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>1</td>
<td>TO REVERSE POST #5</td>
</tr>
<tr>
<td>22</td>
<td>2</td>
<td>TO GROUND POST BY IGNITION RELAY</td>
</tr>
<tr>
<td>23</td>
<td>3</td>
<td>+12V TO IGNITION RELAY</td>
</tr>
<tr>
<td>24</td>
<td>4</td>
<td>TO TAILGATE AJAR LIGHT</td>
</tr>
<tr>
<td>25</td>
<td>5</td>
<td>POWER FROM HYDRAULIC PUMP SWITCH TO TRANSMISSION ECU FROM WIRE 37</td>
</tr>
<tr>
<td>26</td>
<td>6</td>
<td>GROUND TO HYDRAULIC PUMP SWITCH FOR PRESSURE LIGHT</td>
</tr>
<tr>
<td>27</td>
<td>7</td>
<td>FROM ACCELERATOR SWITCH IN CAB - NEGATIVE ON BODY ACCELERATOR RELAY #85</td>
</tr>
<tr>
<td>28</td>
<td>8</td>
<td>FROM HOPPER WORK LIGHT SWITCH IN CAB TO HOPPER WORK LIGHT RELAY #86</td>
</tr>
<tr>
<td>29</td>
<td>9</td>
<td>FROM STROBE SWITCH IN CAB TO STROBE RELAY #86</td>
</tr>
<tr>
<td>30</td>
<td>10</td>
<td>OUTSIDE WORK LIGHTS TO OUTSIDE WORK LIGHT RELAY #86</td>
</tr>
<tr>
<td>31</td>
<td>11</td>
<td>TO DRIVER ALERT BUZZER IN CAB FROM BODY SWITCH</td>
</tr>
<tr>
<td>32</td>
<td>12</td>
<td>LED FLASHER (SPARE)</td>
</tr>
</tbody>
</table>

| 8-PIN BLACK (PUMP/OVERSPEED) |

<table>
<thead>
<tr>
<th>WIRE #</th>
<th>PIN #</th>
<th>Description</th>
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<tbody>
<tr>
<td>33</td>
<td>1</td>
<td>GROUND TO HYDRAULIC PUMP FROM PTO BLOCK</td>
</tr>
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<td>34</td>
<td>2</td>
<td>FROM HYDRAULIC PUMP PRESSURE SWITCH TO CAB HYDRAULIC PUMP SWITCH FROM WIRE 26</td>
</tr>
<tr>
<td>35</td>
<td>3</td>
<td>NEUTRAL SIGNAL FROM TRANSMISSION ECU NEUTRAL INTERLOCK RELAY #85</td>
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<tr>
<td>36</td>
<td>4</td>
<td>RETURN POWER FROM TRANSMISSION OVERSPEED CONTROL HYDRAULIC PUMP RELAY #86</td>
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<td>37</td>
<td>5</td>
<td>POWER TO TRANSMISSION OVERSPEED CONTROL FROM WIRE 25</td>
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<td>6</td>
<td>ACCELERATOR TO ENGINE BODY ACCELERATOR RELAY #87</td>
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<td>7</td>
<td>POWER TO HYDRAULIC PUMP HYDRAULIC PUMP RELAY #30</td>
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<td>40</td>
<td>8</td>
<td>FRONT WORK LIGHTS</td>
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</table>

CAB CONSOLE AND PUMP OVERSPEED
SECTION 4
GENERAL REPAIR
Owner’s/Operator’s Manual
COBRA - VIPER

SECTION 4
GENERAL REPAIR

DRIVING THE DIFFERENCE

COBRA - VIPER

PUMP OVERSPEED CABLE

PIN #1 12V TO HYDRAULIC PUMP SOLENOID (NEG)
PIN #2 12V FROM PRESSURE SWITCH (NEG)
PIN #3 NEUTRAL SIGNAL FROM TRANSMISSION ECU (NEG OR POS)
PIN #4 SWITCH POWER FROM ECU OVERSPEED CONTROL (POS OUT)
PIN #5 POWER FROM ECU OVERSPEED CONTROL (POS IN)
PIN #6 ACCELERATOR TO ENGINE OVERSPEED CONTROL (POS)
PIN #7 POWER TO HYDRAULIC PUMP SOLENOID (POS)
PIN #8 FRONT WORK LIGHTS (OPT POS)

PUMP OVERSPEED CABLE

DEUTSCH PIN #1 12V TO HYDRAULIC PUMP SOLENOID (NEG)
PIN #2 12V FROM PRESSURE SWITCH (NEG)
PIN #3 NEUTRAL SIGNAL FROM TRANSMISSION ECU (NEG OR POS)
PIN #4 SWITCH POWER FROM ECU OVERSPEED CONTROL (POS OUT)
PIN #5 POWER FROM ECU OVERSPEED CONTROL (POS IN)
PIN #6 ACCELERATOR TO ENGINE OVERSPEED CONTROL (POS)
PIN #7 POWER TO HYDRAULIC PUMP SOLENOID (POS)
PIN #8 FRONT WORK LIGHTS (OPT POS)

PUMP OVERSPEED CABLE

DEUTSCH 8-PIN CONNECTOR
PART #DT06-08SB

WEDGE
PART #W8S

SOCKETS
PART #0462-201-16141
BLANK
PART #114017

PART #117988
4-29
SECTION 4
GENERAL REPAIR

Owner’s/Operator’s Manual

COBRA - VIPER

THE WIRES ARE COVERED WITH 1/2" LOOM FROM THE FUSE HOLDER TO THE FLYING LEAD END

ASSEMBLY PARTS

FUSE HOLDER (NO FUSE)
1
DEL CITY PART #78335

3/8" RING TERMINAL
2
DEL CITY PART #78335

BUTT SPLICE
1
DEL CITY PART #923005

#10 RING TERMINAL
1
DEL CITY PART #953105

3/8" RING TERMINAL
1
DEL CITY PART #78335

30 AMP FUSE
1
DEL CITY PART #78305

PART #120062

POWER HARNESS
20'

10AWG BLACK
10AWG RED
SECTION 4
GENERAL REPAIR
Owner’s/Operator’s Manual
COBRA - VIPER

DIGITAL MULTIMETER

LED TEST LIGHT
ELECTRICAL TROUBLE SHOOTING GUIDE LINES

Electrical trouble shooting will be less intimidating if remembering that all electric circuits are electricity passing from the battery through the wires, fuses, switches and relays to the component or components and to ground, from which it is passed back to the battery. Any electrical problem is an interruption of the flow of electricity to and from the battery.

The two instruments on the opposite page are the main tools that are used in trouble shooting this 12 volt, negative ground, alternator charged system. NOTE: For trouble shooting purposes the battery will need to be connected but when servicing any components remove the ground cable and the 30amp inline fuse located at the power source.

GENERAL INFORMATION:

The previous chapter holds the various electrical schematics for the packer unit and a chassis to packer wiring schematic is sent along with the truck. Refer to the individual schematics for the problem being investigated. Page 4-20 thru 4-30 is the harness scheme for the packer body and should give a good understanding of tracing problems related to the packer body.

This chapter is designed to help with most problems encountered and the diagnostic steps in solving those problems.

CHECKING FOR VOLTAGE

Electrical problems generally are attributed to blown fuses, loose or corroded connections or a failed relay. Check these things as a first step in trouble shooting. When changing a blown fuse always use the same amperage rating as the circuits require this amount of protection. Using a larger fuse value could cause serious damage. If the new fuse blows soon after replacement do not replace until the problem is found and corrected.

Starting at a point closest to the power source and following it along the path of the circuit having a problem is usually the fastest way to find the problem. Pay special attention to points where connections are made as these can be the trouble areas. Connector cases hide oxidation and misaligned or loose wires. Often this will be the case if intermittent problems are being experienced.

The truck ignition may need to be in the on position to have voltage to most of the circuits.

CHECKING FOR GROUND

To determine if a component is grounded, disconnect the ground from the battery and having set the multimeter to the ohms scale connect one lead of the multimeter to a good ground. Connect the other lead to the ground wire of connection being tested. The resistance should be 5 ohms or less if the ground is good.
The first step in trouble shooting a circuit controlled by a relay is to understand how a relay works. When power is applied across the 85 and 86 terminals (control circuits) current passes through the coil which builds a magnetic field in the bar it is wrapped around. This pulls the steel plate to it and that is the audible snap heard when power is applied. The spring attached to the steel plate pulls the plate away from the bar when power is removed. The relay uses a low current circuit (control circuit) to open and close the high current circuit (power circuit).

If a failed relay is suspected, while being close enough to hear, have the switch to the component in question turn on. Remember you must have the ignition key on. When the switch is turned on an audible snap should be heard. Continuity between 30 and 87 should be found at this point. With the switch in the off position continuity should be between 30 and 87a. If not then you have a failed relay that needs replaced.

It is important to remember that relays can be wired to have power energize the circuit or can be wired to have ground energize the circuit. On the following page are examples of each.
Rear Loader Daily Maintenance:

1. Initiate Lockout/Tagout Procedures found in Section 4 - 1.

2. Inspect all safety and operational decals, making sure they are legible and fully intact. In the case that decal replacements are necessary, contact your local New Way distributor or call the factory to order free replacements.

3. Inspect for proper operation of all lights and warning devices, including backup and tailgate ajar alarms. Repair as necessary.

4. Perform a pre-operation inspection of the unit by walking around it and:
   
   Check it in accordance with the chassis manufacturer’s guidelines.
   
   Check it in accordance with our “Refuse Packer” guidelines listed in Section 3 – “OPERATION” of this manual. Do Not START or OPERATE any Equipment that is MALFUNCTIONING.

5. Check Hydraulic system sight gage for recommended oil level (manual shut-off valves are in open position) and inspect for leaks - without operating engine or hydraulics.

6. Remove debris from under and behind ejection panel, and all areas around the telescoping ejection cylinder. For this purpose it is strongly suggested you use a wooden handled garden hoe or similar tool.

7. Check all mounting bolts, cylinder pins, and other fasteners for placement and tightness. Adjust or replace as necessary with the same grade and size.

8. Grease the sweep pivot fittings daily.

9. Grease the sweep and the slide assembly guide rails each day. Put the slide in the “down” position and rotate the sweep “in”. Grease the top and bottom metal surface railings on the right and left sides to eliminate excessive wear. It is strongly suggested to use a swab (rag tied to a wooden handle) to apply grease to these rails.

10. Check the condition of the cables, clamps and attachments on winch applications. Replace if damage is evident.

12. Check all cylinder mounting points for metal fatigue or cracked welds. Repair before use.

13. Check operation of all control levers and buttons to function properly and cause correct action of components without problems.

14. Refer to chassis manufacturer’s manual for maintenance procedures on the chassis.
SECTION 5
MAINTENANCE

Owner’s/Operator’s Manual

DRIVING THE DIFFERENCE

CYLINDERS

1. Inspect cylinders on a weekly basis for excessive leakage, and check cylinder rods for scratches or nicks that may cause additional damage to the wipers, bushings, and seals. Nicks and scratches should be polished to prevent additional damage. (Note: Cylinder rods should be inspected in the fully extended position therefore safety precautions need to be in place to prevent potential harm.

FRONT MOUNT PUMPS

Front mounted pump drive shafts should be inspected for tightness of the set screws where the shaft attaches to the pump daily. There are four bolts to the engine flywheel to check for tightness also. The three grease fittings should be greased daily.

Every six months the set screw should be loosened and the knuckle removed from the splined shaft. New spline lubricant (part #119732) should be applied and the assembly replaced. Ensure that the three set screws are secure.

Routine Washing:

When necessary to wash interior, follow Lockout/Tagout procedures as specified and include a helper to be an outside observer. “CAUTION: Interiors may become slippery and create a hazard to the person within. An observer stationed outside could summon help if needed.”

Suggested washing Safety Apparel includes but not limited to; rainsuit, goggles, leather gloves, rubber boots.
Weekly Maintenance:

Lubricate all points on a weekly basis unless otherwise noted. Refer to Grease Fitting Location Diagram on Page 5-3 for location of numbered fittings.

#1. Tailgate Cylinders lube with 30 weight oil (Daily). Apply grease to tailgate slide.

#2. Sweep Panel pivot pipe (2) grease fittings (Daily).
    Rotate sweep in to expose fittings.
    Follow lockout/tagout.

#3. Sweep Cylinder lugs (4) grease fittings.

#4. Slide Cylinder (2) grease fittings bottom of cylinder, lube top pins with 30 weight oil.

#5. Rear Control handle pivot (1 or 4) grease fittings.

#6. PTO/pump drive line may contain (3) grease fittings (if equipped).

#7. Swab a high quality grease/chassis lube to ejection panel wear surfaces (2 channels) and to the slide guide rails (2 channels).

#8. Apply 30 weight oil to all linkage and friction points that are not lubricated with grease fittings.

#9. Refer to chassis manufacturer’s manual for lubrication schedule for the chassis.
This page and page 5-3 reference each other.

Grease Fitting Location Chart.
Rear Loader Monthly Maintenance:

1. Check all wiring connections. Tighten or replace as necessary.
2. Check wires for excessive wear, kinking or crimping. Replace as necessary.
3. Check all fasteners for excessive wear and tightness. Replace or tighten as necessary.
4. Check all hydraulic hoses and pipes for damage and wear. Replace as necessary.

Oil Supply Tank

1. Hydraulic oil filter: Replace after the first 50 hours of use and every 250 hours thereafter. (Note: hydraulic oil filter should be changed in the case of any major hydraulic component failure.
2. Air Filter / Breather Cap: It must allow free air flow for the oil tank. Inspect daily to assure that the cap is properly attached and free of obstruction. Replace every six months (minimum) and more frequently in dirty conditions.
3. Hydraulic fluid: Replace after first six (6) months and every year thereafter. Refer to oil specifications for replacement oil. (Note: Oil should be drained and replaced in the case of any major hydraulic component failure.)
4. Suction strainer: Remove and clean the screen each time the oil is changed.
5. The optional high pressure filter should be changed at the same interval as the hydraulic oil filter.
HYDRAULIC SYSTEM MAINTENANCE

DAILY CHECK OF OPERATING TEMPERATURE (APPROX 35 DEGREES F) AND THE PROPER LEVEL AS SHOWN.

This level would be with the ejection panel full forward with the cylinders fully retracted, the tailgate closed and locked, the sweep rolled open(cylinders closed) and the slide in the full down position.

Check that the breather is clean and free of obstruction. (Replace this breather part # 106229 every 6 months.)
The return filter should be changed initially after 50 hours of use and should be changed every 250 hours thereafter. Order part #109880. Using a 1/2” combination wrench or socket, loosen and remove the six cap screws and remove the cover and spring. Lift the bypass valve and the filter out and replace with the new filter. Replace the bypass valve and the spring and cover.

The suction strainer (part #106231) should be cleaned when the hydraulic fluid is changed. Initially clean this strainer at six months and then yearly thereafter when hydraulic fluid is being changed. With an 18mm combination wrench loosen the cover and remove the cover, disc and seal assembly. Pry off the clip and remove the strainer. Clean with mineral spirits and allow to dry before reassembling.
### OIL SPECIFICATIONS:

<table>
<thead>
<tr>
<th>Brand:</th>
<th>Northland Talamar Extreme BLUE IN COLOR</th>
<th>Northland Talamar All Season RED IN COLOR</th>
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<tr>
<td>IOS Viscosity Grade:</td>
<td>ASTM D2422</td>
<td>32</td>
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<td>Gravity Deg. API</td>
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<td>Specific Gravity</td>
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<td>Pour Point Degree F</td>
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<td>Flash Point Degree F</td>
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<td>ASTMD445</td>
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<td>cST2100c</td>
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<td>Viscosity: SUS@100f</td>
<td>ASTM D2161</td>
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<td>ASTM D2270</td>
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<td>Rust Test</td>
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<tr>
<td>Dielectric Strength, KV min.</td>
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When adding or replacing the hydraulic fluid give the above information to your supplier to provide a similar product. The oil provided with the unit is a premium hydraulic fluid that is formulated to meet the stringent performance requirements of refuse collection equipment exposed to broad ambient operating temperatures.
### Table 3: Hose and Tubing Naming Convention

To be Used as Description

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<td>H - Hydraulic Hose</td>
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<td>Pressure in Ten psi for Pneumatic (25 for 250 psi)</td>
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**Example:**
3/8" Hydraulic Hose comprised of 3000 psi rated hose, #6 Female 37° Flared Swivel Straight fitting on one end, #6 Male JIC Long 90° Fitting on the other end, 78.5 inches long from center

H3006-06FX0N-06MJ9L-078-2
**SECTION 5**  
**MAINTENANCE**

**Owner’s/Operator’s Manual**

**COBRA - VIPER**

---

**Scranton Manufacturing Co. Corporate Procedure**  
**Part Numbering and Naming Convention**

---

### Table 4: Fitting Naming Convention
To be used as Description, use only descriptors that are necessary

<table>
<thead>
<tr>
<th>Type of Fitting</th>
<th>End Size</th>
<th>Fitting Reach</th>
<th>Fitting Configuration</th>
<th><strong>FTG, XXX, X X X X X X X X</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>HYD - Hydraulic (Steel)</td>
<td>01 - 1/16 inch</td>
<td>N - Normal</td>
<td>0 - Straight</td>
<td>If Req’d</td>
</tr>
<tr>
<td>HOSE - Hose-crimp on or slip fit</td>
<td>02 - 1/8 inch</td>
<td>S - Short</td>
<td>3 - 30°</td>
<td>If Req’d</td>
</tr>
<tr>
<td>PNU - Pneumatic</td>
<td>03 - 3/16 inch</td>
<td>L - Long</td>
<td>4 - 45°</td>
<td>If Req’d</td>
</tr>
<tr>
<td>BLP - Black Pipe</td>
<td>53 - 5/32 inch</td>
<td>X - Extra Long</td>
<td>6 - 60°</td>
<td>If Req’d</td>
</tr>
<tr>
<td>BRS - Brass</td>
<td>04 - 1/4 inch</td>
<td>Y - Extra Extra Long</td>
<td>9 - 90°</td>
<td>If Req’d</td>
</tr>
<tr>
<td>SS - Stainless Steel</td>
<td>05 - 5/16 inch</td>
<td>P - Plug</td>
<td>10 - 120°</td>
<td>If Req’d</td>
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<td></td>
<td>06 - 3/8 inch</td>
<td>C - Cap</td>
<td>11 - 180°</td>
<td>If Req’d</td>
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</tbody>
</table>

**Additional Descriptors**  
(separate with commas)

- HH - Hex Head
- SH - Hex Socket Key
- SSQ - Square Socket Key
- SQ - Square Head
- LN - Locknut Included
- FORG - High Pressure Forged
- GR - Chromo Plated
- ZN - Zinc Plated (Galvanized)
- R - Restrictor (followed by Diameter)
- MAG - Magnetic

---

**Example:**

- **FTG, HYD, 8MO-6MJ-9L**: Hydraulic Fitting, #8 Male O-ring Boss to #6 Male 37° Flare 90° Long Elbow
- **FTG, BLP, 12MP-PN, SH**: Black Pipe Plug, 1/2 NPT, Socket Hex Head
- **FTG, HYD, 16MO-16HB-0N**: Hydraulic Fitting, #16 Male O-Ring Boss to 1 inch Hose Barb
- **FTG, HYD, 12MO-9MJ-9MJ-TN**: Hydraulic Fitting, #12 Male O-Ring Boss to #9 Male 37° Flare Tee