

PAPAS

WASTE EQUIPMENT INTERNATIONAL

OPERATING & MAINTENANCE INSTRUCTION MANUAL



“Commuter”

Mini rear loading compaction unit

Manufactured by
Papawaste Equipment International Pty Ltd
(A.B.N. 131 635 902 43)

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Thank you for choosing a Papas “Commuter” series mini rear loading compaction unit. The following information will help in understanding the controls and operational procedures to ensure the unit operates correctly whilst ensuring the operator’s safety.

Before placing the unit into service, please ensure all relevant staff read this information.

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Section 1 General

The safe operation of this vehicle requires that the operator understands the manufacturers intended use and operation of the various controls and components as outlined in this manual.

This manual is not intended as a complete safety handbook and does not address all workplace occupational health and safety issues.

This vehicle has been designed to comply with the guidelines set out in “Non – Hazardous Waste and Recycling Materials – Occupational Health & Safety guidelines for the collection, transport and unloading of non – hazardous waste and recyclable materials WorkSafe Victoria edition June 2003.

We recommend that you obtain and read this booklet before using this vehicle.

To ensure a long working life for this vehicle, the correct operating and safety procedures, equipment settings and servicing instructions, outlined in sections 2,3 & 4 of this manual must be adhered to.

Whilst this manual is intended to be as complete as practicable there will be times when we have not completely described a repair or maintenance procedure in this manual. Please do not attempt these repairs without first contacting our service department on (08) 8168 4000

Keep a copy of this manual with the vehicle at all times.

Section 2 Operating and safety procedures

2.1 Safe operating rules

It is the responsibility of all drivers to ensure they observe safe operating instructions. We recommend you follow your employer’s safety requirements and instructions but suggest the following as a minimum:

- A Wear approved personal protective safety equipment as issued by your employer when and where necessary.
- B No person is to be allowed to ride on any external part of the vehicle whilst operating or in motion.
- C Any safety problems or issues are to be reported immediately to your supervisor or manager. Do not wait until you return to the depot if damage/accident or injury is probable.
- D When operating any lifting gear, ensure no person or persons are standing in an area where they may be struck by the bin, lifting gear or any object falling from the bin. Minimum distance between lifter and any person is 1.5 metres.

Careful attention should be paid when raising and lowering the bin, ensuring no one is within the lowering arc of the lifter as it is possible for the bin to be accidentally released from the lifting gear and injure personnel.

Careful attention should also be paid when raising and lowering the rear door, ensuring no one is within the arc.

- E No person is to enter or place any part of their body or limbs into the hopper or compaction area of the vehicle whilst hydraulic or similar equipment is activated or may be activated.

2.2 Understanding the controls

Before operating the vehicle for the first time, it is necessary to familiarise yourself with the location and operation of each of the controls.

Cabin Controls



- PTO switch Located on dash LHS of steering column at driver's knee level engages and disengages the PTO which drives the hydraulic pump. Ensure engine is at idle speed 500 rpm and then hold the PTO button "IN" for 5 seconds. An audible beeping will commence to indicate the PTO is engaged. Beeping will continue until PTO is turned "OFF" by depressing the PTO button

DO NOT DRIVE WITH PTO ENGAGED



- Work Light Toggle switch for turning on the work light to illuminate the Hopper and Bin Lifter area at the rear of the vehicle is located on the dash board right hand side of the steering column
- Rotating Lights Toggle switch for turning on the rotating lights is located on dash board next to the work light switch. Rotating lights **must be ON** while undertaking collection
- Reversing Buzzer Toggle switch for changing the decibel level from medium to HIGH

IN CABIN - Body Controls



Mode	<p>In the Load position enables the Compactor and Bin Lifter functions only to operate</p> <p>In Unload position enabled the Tailgate Unlocked - Tailgate Raise / Lower - Ejector Extend / Retract and Tailgate Locked functions to operate</p>
Emergency Stop	<p>Stay put button with pull to release operation. Pushing the button will stop all functions immediately. Light appears when activated.</p>
Tail Gate Locked	<p>Rear door open light is located external of the truck</p> <p>When light is ON the Rear Door of compactor is not fully closed</p> <p>When light is OFF the Rear Door of compactor is securely closed</p>
<p><i>Controls on tailgate will not operate if red light is ON</i></p>	
Tailgate raise	<p>Unlocks and raises tailgate for unloading at landfill. Releasing the switch will immediately stop the operation.</p>
Tailgate lower	<p>Lowers tailgate at a predetermined speed and locks tailgate to body. Releasing the switch will immediately stop the operation.</p>
Blade Extend	<p>Extends compaction blade for Ejecting load at landfill. Releasing button will immediately stop the operation.</p>
Blade Retract	<p>Retracts compaction blade. Releasing the button will stop the operation.</p>

Cameras and Rear Obstacle Warning System

Two Cameras are positioned at the rear of the vehicle

- Rear View
- Bowel / Bin Lifter View

The In Cab screen can provide a single image or a split view with both camera images on the screen at the one time

Normal operation the default camera is Bowel / Bin Lifter View and is ON all the time

When the vehicle is placed into reverse gear the screen with automatically swing across to the Rear View and the Rear Obstacle System will automatically turn ON

Please refer to the Greensight Rear Obstacle System and Greencam Monitor operating manuals for operating instructions



TAILGATE - Body & Bin Lifter Controls

Compactor Controls are located on the Left Hand Side of the Tailgate



- | | |
|------------------------|---|
| Auto pack | Starts compaction cycle. Compaction cycle will stop when slide blade has fully lowered. Push button again to complete cycle. |
| Slide-Raise/Lower | Manually activates the slide blade. Releasing switch will stop the operation |
| Scoop-Out / In | Manually activates scoop blade. Releasing switch will stop the operation. |
| Bin Lifter-lower/raise | Locks bin to Bin Lifter and raises / empties bin into hopper.
Lowers empty bin to ground level and unlocks bin from Bin Lifter |



- | | |
|-------------------|--|
| Bin Lifter Enable | Button must be depressed simultaneously with Bin Lifter - Lower / Raise switches to operate the Bin Lifter
Releasing the Bin Lifter Enable button will immediately stop the operation of the Bin Lifter |
| Emergency Stop | Located on both sides of the Tailgate. Stay put button with pull to release operation. Pushing the button will stop all functions immediately. Light appears when activated. |

AUTOMATIC SELF DREASING SYSTEM

The self-greasing unit is set to operate to pump three (3) minutes every hour

The cycle rate of the greasing unit can be adjusted to suit the Operating Hour of the truck

[Refer to the Groeneveld Operating Instruction Manual](#)



The grease to be used **MUST** be an EP2 NLGI2 grade grease with no more that 2.5% Moly content

A recommended brand is IMXO2 grease

HYDRALIC OIL LEVEL & TEMPERATURE

The Hydraulic Oil Tank has a built in sight gauge which visually displays the level of the oil and the condition of the oil (Clean / Dirty / Burnt)

The built in temperature gauge visually displays the operating temperature of the oil



2.3 Operating system

All operations are controlled by the PLC located in the control box on the passenger side of the compactor.

Ejector blade The ejector blade is operated via selector switch located externally on RHS of compactor body. This is a direct ON / OFF function. The ejector has a built in load holding valve, which restricts the compaction cylinder from retracting at pressure less than 500psi. This enables a maximum payload and allows the operator to know when the body is full.

Tailgate The tailgate is operated via selector switch located externally on RHS of compactor body. This is a direct ON / OFF function. Tailgate speed is controlled as per WorkSafe requirements stating that tailgate should not descend at a speed of less than 20 seconds.

Tailgate Lower switch is required to be held across in Lower position for approximately 20 seconds after door has closed, until the RED light goes out. During the 20 second period the rear door Locking Pin is activated.

Red Tail Gate Open light appears when tailgate is not securely locked. Controls on the tailgate will not operate if red light is on.

Scoop blade The scoop blade can be manually operated via selector switch located on the tailgate. This is a direct ON/OFF function. Releasing switch will stop the operation

Slide blade The slide blade can be manually operated via selector switch located on the tailgate. This is a direct ON/OFF function. Releasing switch will stop the operation

Autopack Auto Pack cycle is an automatic cycle in two stages using a single pressure switch to control each function.

First stage When button is depressed the scoop blade with open until required pressure is achieved. Once achieved slide blade will lower until contact with lower proximity switch located on kerb side or tailgate. When activated cycle will stop cycle.

Second stage When button is depressed again the scoop blade with close until required pressure is achieved. Once achieved slide blade will raise until contact with top proximity switch located on kerb side of tailgate. When activated cycle will stop cycle.

Emergency stop Buttons are located either side of the loading hopper to stop the auto pack cycle. Once released the cycle will not restart until autopack button is depressed. Override selector switches for the scoop and slide blade operation can be used to manually operate either function in an emergency.

2.4 Precautions

Stored energy in hydraulic system can be extremely dangerous. Do not adjust any hydraulic components unless directed to do so by a competent hydraulic technician.

After one week, check and tighten all hydraulic hose and pipe joints. This is a normal requirement due to a slight loosening of joints as a result of cyclic strain occurring during initial operation.

2.5 Start up procedure

Once truck engine has been started, check:

1. Make a visual check around the vehicle for oil leaks
2. The oil tank has appropriate amount of oil
3. Ensure rear door is closed and securely locked
4. PTO switch is off

2.6 Loading the vehicle

1. On arrival at first collection point, ensure the vehicle is in Neutral and hand brake "ON" then turn on the PTO
2. Turn Rotating flashing lights "ON"
3. Place 240 litre wheelie bin(s) against lifter with lifter comb in line with lip under bin.
4. Raise bin lifter comb by turning bin lifter Raise switch and pushing the Bin Lifter Enable button simultaneously, will lock the bin onto bin lifter
5. Once lifter has securely locked bin into position hold until in the fully raised position.
Do not operate if persons are within lifting arc
6. Once bin has been emptied, lower bin using bin lower lever.
Do not operate if persons are within lowering arc
7. Remove bin(s) from lifter.
8. Operate compaction blade to clear hopper by depressing Auto Pack compaction button. Blade will stop in the half cycle position. Pushing the compact button again will complete cycle.
9. Turn PTO off before driving to next collection point.
10. Continue operations 2 – 8 until body is full. This will be indicated by ejection blade being at the front of the body.
11. Once full turn PTO and Rotating Light switches to the OFF position and proceed to the landfill site.

2.7 Unloading the vehicle

1. Check that all is clear to the rear of the vehicle and reverse onto the unloading area, ensuring the vehicle is on a firm level surface,
2. Ensure the vehicle is in Neutral and Hand Brake “ON” then turn PTO “ON”
3. Visually check that the area is clear in the immediate area around the rear of the vehicle
4. Open the rear door by activating tailgate switch to the raise position.

Careful attention should also be paid when raising and lowering the rear door, ensuring no one is within the arc.

5. Operate ejection switch to the extend position to fully eject all rubbish from vehicle.
6. Once blade fully extended, check that all material has been discharged from the body, and leave blade in this position
7. Before closing rear door activate the Auto Pack button to dislodge any material caught around the scoop/slide blade
8. Before closing rear door also check that door seal is clean to ensure watertight seal.
9. If door seal needs cleaning lower door and insert door props to hold door open

Do not stand under the Open Rear Door when inspecting or cleaning door seal

10. Activate tailgate switch to the lower position and hold until light is out (Door Locked)
11. The vehicle is now ready to continue collections or return to the depot.

Section 3 Equipment settings

Hydraulic diagram in section 6 is to be read in conjunction with the following information.

Note: All settings have been preset during start up and commissioning of the unit and should not require further adjustments. Should adjustments be required, please contact us before any changes are made to the settings below. Failure to comply may void warranty.

3.1 Hydraulic system

A gear pump powers the hydraulic system. System pressure for compaction blade and bin lifter is set at 2000psi. System pressure should not be increased above this setting.

Engine governor is set to activate when any function is activated and will increase engine speed to approximately 950 rpm.

Ejection blade has an automatic retract feature to retract under load. This is set at 500psi.

Section 4 Servicing instructions

The following is recommended as a minimum servicing schedule. Failure to comply with the following will cause premature wear and may void warranty.

A. Daily

1. Visual inspection of and around the vehicle to be carried out by the operator. Check all oils, fluids and lights.

B. Weekly

1. Grease lifter, slide, scoop and rear door cylinders and ejector blade pivot points
2. Replace broken or blocked grease nipples
3. Operate and inspect all functions and lights including PTO light switch
4. Check and replace globes as required
5. Inspect hydraulic lines and connections
6. Test operation of all controls
7. Test emergency stop buttons

C. Every 250 Hours or 3 monthly

1. Inspect body for damage. Check for dents and cracks.
2. Inspect all lifter and blade pivots.
3. Inspect ejector blade guides.
4. Inspect rear door pivots and locking mechanism
5. Inspect hopper wear blocks on slides
6. Check vehicle license plates for legality
7. Check safety stickers for legibility

Hydraulics

1. Check oil level and operation of level indicator system
2. Inspect oil filter for integrity
3. Inspect all hoses and fittings for wear and leaks
4. Check PTO operation
5. Inspect pumps mounting
6. Inspect PTO shaft for wear
7. Inspect all cylinder seals

D. Every 2000 hours or yearly

1. As per service C plus
2. Change hydraulic oil and filters

Section 5 Trouble Shooting

The following information is a guide to the most common problems experienced while operating unit.

Fault	Possible cause	Remedy
Lifter will not operate	Bin too heavy Blown hose PTO not engaged Low oil level Emergency stop button in Circuit breaker off Solenoid valve burnt out Loose wire	Leave bin Inspect and replace Engage PTO Add oil Release button Reset Check if indicator light on. If “on” check solenoid. If not on check electrical circuit. Check wiring
Tailgate will not operate	Blown hose PTO not engaged Low oil level Emergency stop button in Circuit breaker off Solenoid valve burnt out Loose wire	Inspect and replace Engage PTO Add oil Release button Reset Check if indicator light on. If “on” check solenoid. If not on check electrical circuit. Check wiring
Tailgate will not unlock/ Tailgate locks too early	Sequence out of adjustment	Reset pressures
Ejection blade will not move	Material lodged under blade Blown hose PTO not engaged Low oil level Emergency stop button in Circuit breaker off Solenoid valve burnt out Loose wire	Open rear door and remove Inspect and replace Engage PTO Add oil Release button Reset Check if indicator light on. If “on” check solenoid. If not on check electrical circuit. Check wiring
PTO will not engage	Blown fuse Broken wire Blown globe	Check and replace Check and replace Check and replace

Fault	Possible cause	Remedy
Scoop blade (manual operation) will not operate	Compactor full Blown hose PTO not engaged Low oil level Emergency stop button in Circuit breaker off Solenoid valve burnt out Loose wire	Proceed to landfill Inspect and replace Engage PTO Add oil Release button Reset Check if indicator light on. If “on” check solenoid. If not on check electrical circuit. Check wiring
Slide blade (manual operation) will not operate	Compactor full Blown hose PTO not engaged Low oil level Emergency stop button in Circuit breaker off Solenoid valve burnt out Loose wire	Proceed to landfill Inspect and replace Engage PTO Add oil Release button Reset Check if indicator light on. If “on” check solenoid. If not on check electrical circuit. Check wiring
Auto pack cycle will not operate		
<u>First stage</u>		
Nothing works	Blown hose PTO not engaged Low oil level Emergency stop button in Circuit breaker off Solenoid valve burnt out Loose wire	Inspect and replace Engage PTO Add oil Release button Reset Check if indicator light on. If “on” check solenoid. If not on check electrical circuit. Check wiring
Scoop opens only	Pressure switch malfunction Slide solenoid valve burnt out	Check pressure & adjust Check if indicator light on. If “on” check solenoid. If not on check electrical circuit.
Cycle does not switch off	Proximity switch	Check LED “off” Readjust sensing distance If “off” and sensing distance ok Proximity switch burnt out

Fault	Possible cause	Remedy
<u>Second stage</u>		
Nothing works	Blown hose PTO not engaged Low oil level Emergency stop button in Circuit breaker off	Inspect and replace Engage PTO Add oil Release button Reset
	Solenoid valve burnt out	Check if indicator light on. If “on” check solenoid. If not on check electrical circuit.
	Loose wire Proximity switch	Check wiring Check LED “off” Readjust sensing distance If “off” and sensing distance ok Proximity switch burnt out
Scoop closes only	Pressure switch malfunction Slide solenoid valve burnt out	Check pressure & adjust Check if indicator light on. If “on” check solenoid. If not on check electrical circuit.
Cycle does not switch off	Proximity switch	Check LED “off” Readjust sensing distance If “off” and sensing distance ok Proximity switch burnt out

Section 6 Hydraulic circuit

Refer to Hydraulic Circuit Diagram with Parts List next page

Section 6 Electrical circuit

Refer to Electrical Circuit Diagram and Parts List next page

SAFE OPERATING TRAINING FOR MOBILE COMPACTORS

Acknowledgment

The client should maintain a copy of this Training Acknowledgment with the original being kept with Papas Waste Equipment International Pty Ltd.

I _____ on behalf of _____

Commissioning of Papas Waste Equipment Compactor type: - 7M3 COMMUTER

Acknowledge receipt of: *Please Tick*

Training in the operation of the above Compactor Unit

An Operation Manual for the safe use of the Compaction Unit

I accept all responsibility and will ensure the appropriate training of all _____ Employees and Contractors takes place before these personnel are permitted to operate the Equipment.

I will ensure through appropriate monitoring techniques that operation of the above equipment will be carried out within the guidelines specified by Papas Waste Equipment International.

I agree to have immediate contact made with Papas Waste Equipment International Pty Ltd (08) 8162 9241 should any fault or damage be reported on the equipment.

I understand that we can only conduct maintenance and repairs on the Commuter Rear Load Waste Compactor units under the supervision or verbal direction of Papas Waste Equipment International Pty Ltd

Clients Representative

Signature _____ Position _____ Date _____

Papas Waste Equipment Representative

Signature _____ Position _____ Date _____

