

OLYMPUS TWIN PACK

OPERATOR'S HANDBOOK



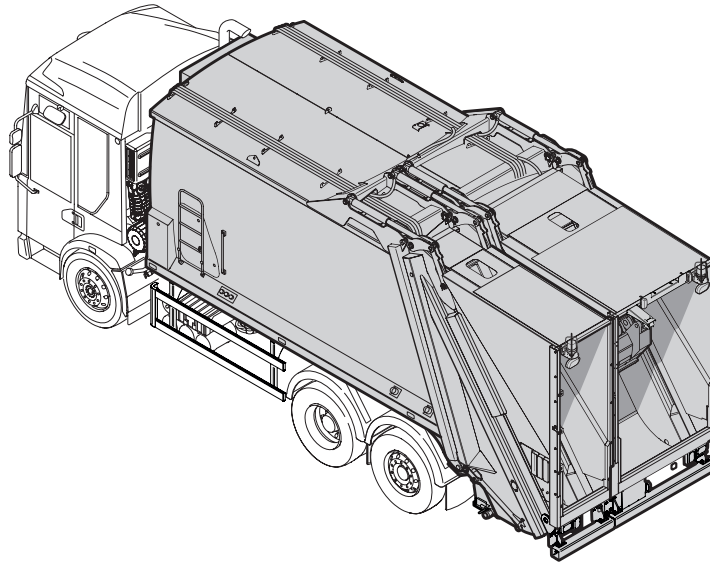
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Olympus Twin Pack Operator's Handbook



Olympus Twin Pack Refuse Collection Vehicle

This Operator's Handbook contains information about the Olympus Twin Pack Refuse Collection Vehicle.

The information in this Handbook must be used in conjunction with the Operator's Handbooks for the chassis-cab and any ancillary equipment such as waste container lifting devices fitted to the refuse collection vehicle.



**IMPORTANT:
BEFORE OPERATING THE REFUSE COLLECTION VEHICLE.**

It is most important that before operating the refuse collection vehicle, all operators:

- Have undertaken a recognised training course in the safe operation of the refuse collection vehicle.
- Read, understand and observe all the instructions stated in Chapter 2 'Safety precautions' of this Handbook.

This Operator's Handbook must always be kept in a safe place in the vehicle it was supplied with.



Dennis Eagle Ltd. (the Company) reserves the right to change the specification, design, material, procedures and dimensions of the vehicles described within this publication without prior notice at any time in the future, in accordance with the Company's policy of continuous product improvement.

Whilst the Company has made every effort to supply an accurate and comprehensive guide to the safe and economic running of the equipment and ensure complete accuracy of information in this manual, no liability for inaccuracies or the consequences thereof, including loss or damage to property, or injury to persons can be accepted by the Company.

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Original instructions.

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Description

The Olympus Twin Pack refuse collection bodywork is a rear loaded, fixed refuse collection bodywork manufactured to EN 1501-1.

Intended use

The Olympus Twin Pack refuse collection bodywork shall be mounted on chassis-cabs specified for refuse collection application and shall be used to collect and transport domestic and industrial waste and recyclable materials.

The Olympus Twin Pack refuse collection bodywork is not designed for:

- Operation in severe conditions, e.g. extreme environmental conditions such as:
 - Below - 25 °C and above + 40 °C temperatures.
 - Operation in a tropical environment.
- Operation in wind velocity in excess of 75 km/h.
- Operation in a contaminating environment.
- Operation in a corrosive environment.
- Operation in potentially explosive atmospheres.
- Handling of loads the nature of which could lead to dangerous situations (e.g. hot wastes, acids and bases, radioactive materials, contaminated waste, especially fragile loads, explosives).
- Operation on ships.

Manufacturer's name and address

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Warwick

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United Kingdom.

Edition	Publication reference	Publication date	Comments
This edition	OT1D-OH-GB03D-R1	February 2019	Update to the loading procedure of Olympus Twin Pack.
Previous editions	OT1D-OH-GB03D-B	September 2018	Front cover and logo revised to follow the latest Terberg RosRoca brand guidelines.
	OT1D-OH-GB03D	October 2015	New edition for introduction of narrow variants.
	OT1D-OH-GB02D	August 2014	Third edition - Elite 6 chassis-cab.
	OT1D-OH-GB01D	January 2013	Second edition - new corporate identity.



Olympus Twin Pack Operator's Handbook

ABOUT THIS OPERATOR'S HANDBOOK

Dennis Eagle Ltd. welcome you as the owner/operator of a new Olympus Twin Pack Refuse Collection Vehicle.

The purchase of the Olympus Twin Pack vehicle represents a major investment on behalf of your organisation.

To protect this investment, it is of utmost importance that you read, understand and observe all the instructions in the appropriate sections of this publication and equivalent publications about machinery and ancillary equipment fitted to the vehicle relating to:

- Safety.
- Correct operation.
- Performance.
- Cleaning.
- Scheduled maintenance.

This Operator's Handbook and the accompanying Service Manual contain information about the Dennis Eagle Ltd. units fitted to the vehicle and are divided into sections appropriate to the configuration of the vehicle supplied, namely:

- Refuse collection body.
- Waste container lifting device.
- Optional equipment (i.e. Footboards).

The Operator's Handbook and Service Manual contain all the relevant information and data necessary to operate the appropriate Olympus Twin Pack unit and carry out designated cleaning, maintenance and inspection procedures.

The information in this Operator's Handbook must be used in conjunction with the Operator's Handbooks for any other manufacturer's chassis-cab, equipment or machines that form part of the vehicle.

Important:

This Operator's Handbook must always be kept in a safe place in the vehicle it was supplied with.

Always consult the Supplementary Information Chapters of each section of the handbook which provide space for inclusion of additional information specific to a particular vehicle or late-breaking information.

Take time to become fully familiar with this vehicle by carefully reading all the publications supplied with the vehicle; the more you know about the vehicle, the greater will be your safety, comfort and economy when driving it.

It is important to read the equivalent publications about machinery and ancillary equipment fitted to the vehicle as such equipment may incorporate interlocks or similar devices which affect the operation or performance of the vehicle. Failure to do this could have a drastic effect on safety, vehicle life, operating costs and downtime.

Failure to observe the instructions, particularly those relating to scheduled maintenance, may affect the terms of our warranty.

If in doubt consult your Dennis Eagle Ltd. representative.



Aftermarket support

Dennis Eagle Ltd. recognises the importance of offering a strong Aftermarket support throughout the life of the vehicle and sees it very much as an extension of the initial vehicle offering.

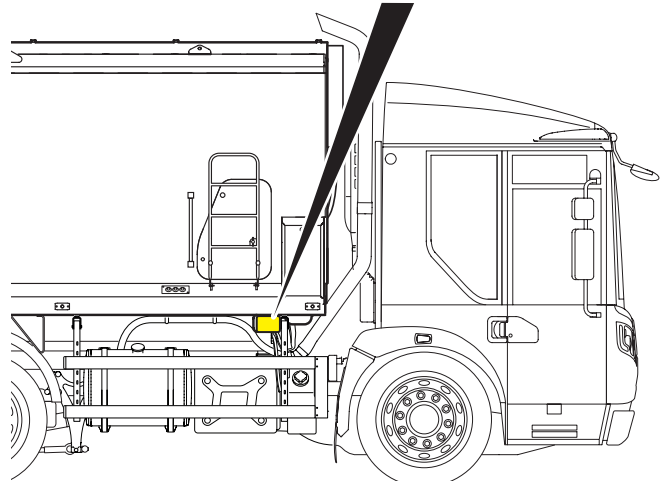
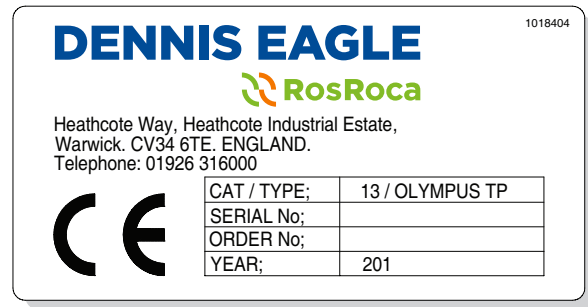
The Aftermarket business comprises a service network with regional centres and a parts business operated from its headquarters at Warwick.

Comprehensive training courses which are well presented and set the standard for the industry are also provided.

For further information about aftermarket operations please contact:

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Body identification label



3821-OT1-D-GB-G2

The body identification label is attached to the right-hand drain box.

The information on the label is shown below:

Machine category / Body type

Serial number

Order number

Year of manufacture



Owner's information

This section provides space for you, the owner, to record the appropriate serial numbers for the chassis-cab, body and equipment fitted to the vehicle.

Vehicle registration number:

Date of purchase:

Chassis-cab model:.....

Chassis-cab VIN:.....

Equipment (i.e. Bodywork)	Manufacturer	Model	Serial number
.....
.....
.....
.....
.....
.....



Safety symbol



This symbol indicates instructions that may have serious risk to health and safety and / or vehicle damage. These instructions **MUST** be adhered to.

Warnings, Cautions and Notes are displayed as follows:



WARNING:
PROCEDURES WHICH MUST BE FOLLOWED PRECISELY TO AVOID POSSIBILITY OF PERSONAL INJURY OR DEATH.

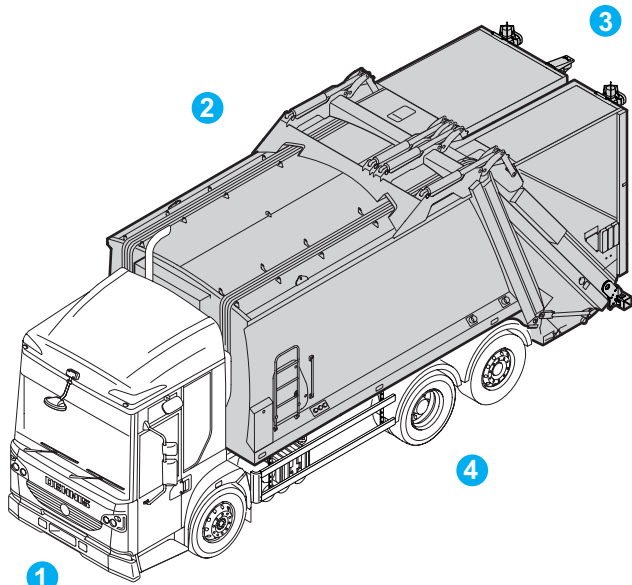


Caution:
Procedures which must be followed to avoid damage to components or malfunction.

Note: Provides additional important information about a procedure or event that is not a **WARNING** or a **Caution**.

Conventions – Right-hand and left-hand side of the vehicle

Where reference is made in this Operator's Handbook to the right-hand and left-hand side of the vehicle, this is relative to a person sitting in the driver's seat.

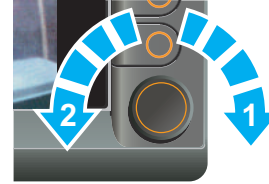


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1. Front.
2. Right.
3. Back.
4. Left.

Clockwise and counter-clockwise

Where reference is made in this Operator's Handbook to turning an item, for example a control knob, 'Clockwise' or 'Counter-clockwise' this relates to the direction of rotation when seen from the front face of the item.



2217-OT1-D-GB-G1

1. Clockwise.
2. Counter-clockwise.

Dimensions and specifications

Unless otherwise stated, all dimensions are in mm and represent the unladen condition. All specifications are subject to manufacturers' tolerances. All weights are in kg and include oil and water. Additional equipment may alter dimensions and weights quoted.

Related publications

The following publications are available in support of the Olympus Twin Pack Refuse Collection Vehicle:

- Quick Reference Guide.
- Service Manual.
- Workshop Manual.
- Electronic Illustrated Parts Catalogue.

They are available from your Olympus Twin Pack supplier.



Olympus Twin Pack Operator's Handbook

CONTENTS		PAGE
1	Introduction.....	1-1
2	Safety precautions.....	2-1
3	How it works.....	3-1
4	Operator's controls	4-1
5	Operating the machine	5-1
6	Options.....	6-1
7	Supplementary information	7-1
I	Index	I-1



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Olympus Twin Pack Operator’s Handbook

CONTENTS		PAGE
1	Introduction.....	1-2
1.1	Refuse collection vehicle.....	1-2
1.2	Olympus Twin Pack refuse collection body.....	1-2
1.3	Olympus Twin Pack configurations.....	1-2
1.4	Olympus Twin Pack body sizes	1-3
1.5	Location of major features	1-4
1.6	One Pass vehicles.....	1-6
1.7	Waste container lifting devices.....	1-6
1.8	Waste container lifting device options	1-6
1.9	CE certification.....	1-6



1 Introduction

1.1 Refuse collection vehicle

A Refuse Collection Vehicle (RCV) is used to collect and transport domestic and industrial waste. The waste is compacted in the collection body by a hydraulically operated mechanism to achieve maximum payload before transfer to a refuse tip.

1.2 Olympus Twin Pack refuse collection body

The Olympus Twin Pack refuse collection body has two separate compartments, the left-hand body and the right-hand body in a single fabricated structure.

The Olympus Twin Pack refuse collection bodywork is generally mounted on Dennis Eagle Elite chassis-cab. The bodywork can also be mounted on other manufacturers' chassis-cab specified for refuse collection application.

1.3 Olympus Twin Pack configurations

The Olympus Twin Pack refuse collection body is available in three configurations, 35/65, 40/60 and 50/50.

On 35/65 and 40/60 bodies, the left-hand body is narrower than the right-hand body.

On 50/50 bodies, the left-hand body is the same size as the right-hand body.

35/65 and 50/50 bodies are fitted to 2.50 m wide 'wide' chassis; 40/60 bodies are fitted to 2.25 m wide 'narrow' chassis only.

This Operator's Handbook is common to all configurations and all body sizes.

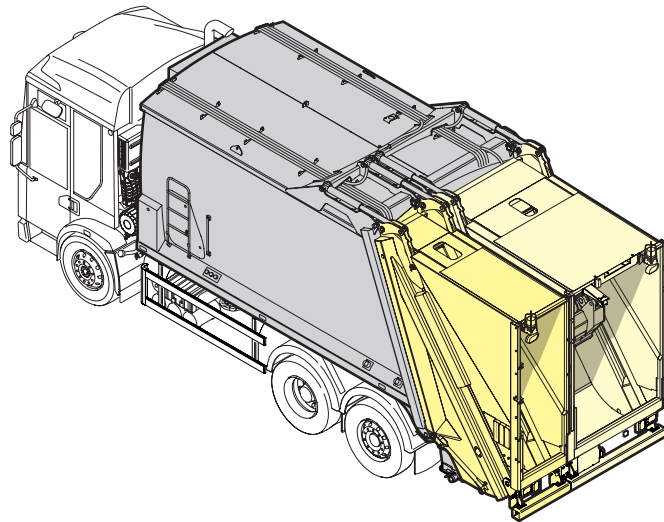


Fig. 1-1 Dennis Eagle Olympus Twin Pack 35/65 refuse collection body

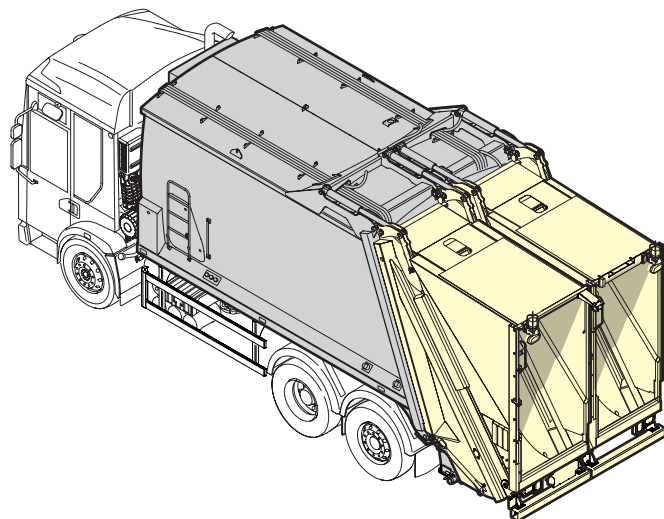


Fig. 1-2 Dennis Eagle Olympus Twin Pack 50/50 refuse collection body



1.4 Olympus Twin Pack body sizes

The Olympus Twin Pack refuse collection body is available in the following body sizes:

Size		12**	16	19	22	27
35/65	Capacity, left-hand (small) compartment (m ³).	4.5	5.9	6.8	7.7	9.8
	Capacity, right-hand (large) compartment (m ³).	8.1	10.4	12.1	13.7	17.2
50/50	Capacity, left-hand compartment (m ³).	6.3	8.2	9.4	10.7	13.4
	Capacity, right-hand compartment (m ³).	6.3	8.2	9.4	10.7	13.4

** 12 is only available as a 'One-pass variant'.

Size		13N	17N
40/60	Capacity, left-hand (small) compartment (m ³).	5.1	7.7
	Capacity, right-hand (large) compartment (m ³).	6.7	10.0



1.5 Location of major features

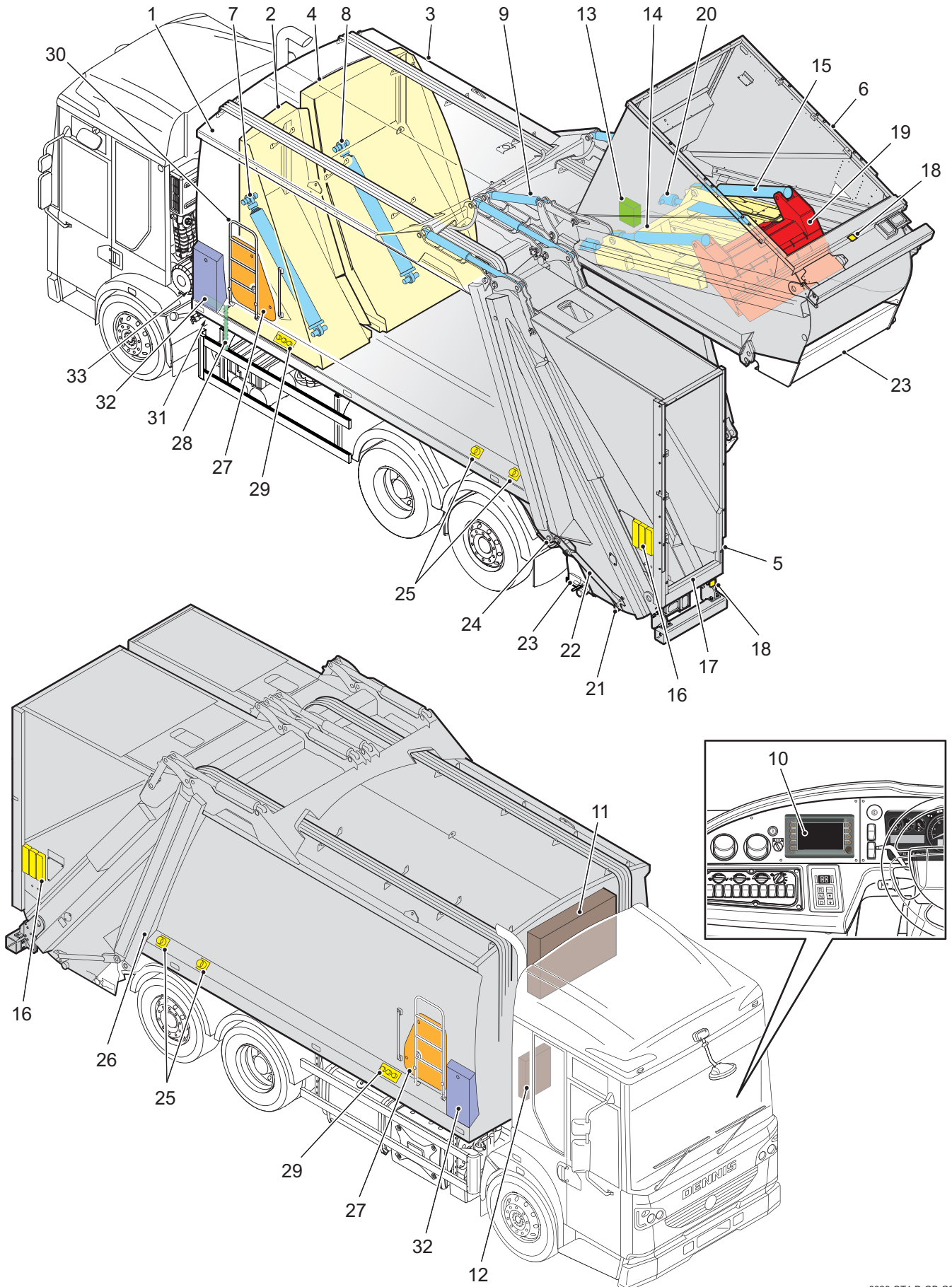
The location of major bodywork features for the Olympus Twin Pack series of refuse collection vehicles is shown in Fig. 1-3 (left and right-hand side of vehicle):

1. Left-hand body.
2. Left-hand ejection plate.
3. Right-hand body.
4. Right-hand ejection plate.
5. Left-hand tailgate.
6. Right-hand tailgate.
7. Left-hand ejection cylinder.
8. Right-hand ejection cylinder.
9. Tailgate raise/lower cylinder.
10. Cab control station (see '4.2 Cab control station' on page 4-4).
11. Body hydraulic oil tank.
12. Body hydraulic control valve.
13. Compaction mechanism hydraulic control valve ^R.
14. Carriage plate ^R.
15. Pack plate cylinder ^R.
16. Compaction mechanism control station (see '4.9 Compaction mechanism control station' on page 4-45).
17. Rave rail ^L (hand loading).
18. Emergency stop push-buttons L (beneath rave rail) (see '4.11 Emergency stop push-buttons' on page 4-52).
19. Packer plate ^R.
20. Carriage plate cylinder (behind covers) ^R.
21. Tailgate drain.
22. Tailgate prop (see '5.7 Propping/unpropping the tailgate' on page 5-22).
23. Leachate tank*.
24. Tailgate/body lock.
25. Tailgate lowering control panel (see '4.8.22 Tailgate lowering control panel' on page 4-44).
26. Body/tailgate seal ^L.
27. Body access door.
28. Body drain.
29. External discharge control panel* (see '4.8.16 External discharge control panel (option)' on page 4-40).
30. Access ladder*.
31. Hand pump* (see Service Manual).
32. Electrical main body box.
33. Hydraulic filler point.

* = Optional features.

^L = Left-hand shown

^R = Right-hand shown



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Fig. 1-3 Olympus Twin Pack refuse collection bodywork features (left and right-hand side of vehicle)



1.6 One Pass vehicles



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On One Pass vehicles, the Olympus Twin Pack refuse collection bodywork is combined with a top loaded bodywork located between the cab and the front of the Olympus Twin Pack refuse collection body.



2955-OT1-D-GB-G2

Fig. 1-5 Open waste container lifting device

1.7 Waste container lifting devices

Your vehicle may be fitted with one or more waste container lifting devices to allow the discharging of refuse containers. Operation, maintenance and workshop instructions and data will be supplied with the waste container lifting device and must be read in conjunction with these instructions.

Waste container lifting devices fitted to this machine must be installed to Dennis Eagle approved specification and in compliance with the requirements of The Supply of Machinery (Safety) Regulations.

1.8 Waste container lifting device options

The Olympus Twin Pack refuse collection vehicle is available in three basic configurations:

Open system (see Fig. 1-4).

Open waste container lifting device (see Fig. 1-5).

Closed waste container lifting device (see Fig. 1-6).



3995-OT1-D-GB-G1

Fig. 1-6 Closed waste container lifting device



3994-OT1-D-GB-G1

Fig. 1-4 Open system

1.9 CE certification

This machine is supplied in compliance with a CE certified type. Any change to specification of hardware or controls is at the machine owner's own risk and may nullify CE certification status. Unauthorised modification may also invalidate the warranty granted with this product. If in doubt please consult Dennis Eagle Ltd.



Olympus Twin Pack Operator's Handbook

CONTENTS		PAGE
2	Safety precautions.....	2-3
2.1	Introduction.....	2-3
2.2	Use of refuse collection vehicle.....	2-3
2.3	Safety symbol, warnings, cautions and notes.....	2-4
2.4	Trained personnel	2-4
2.5	Use of these instructions	2-4
2.6	Personal hygiene	2-4
2.7	Protective clothing	2-5
2.8	General	2-5
2.9	Before leaving the depot	2-6
2.10	Travelling to collection point	2-7
2.11	Collecting refuse.....	2-7
2.12	Travelling to discharge site.....	2-8
2.13	At discharge site.....	2-9
2.14	Before leaving discharge site	2-9
2.15	Warning labels.....	2-10



SAFETY PRECAUTIONS

2

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2 Safety precautions

2.1 Introduction

This chapter gives guidelines for the safe operation of refuse collection vehicles.

The information in this chapter must be read in conjunction with the Safety Precautions stated in the manufacturer's instructions for any ancillary equipment fitted to the refuse collection vehicle.

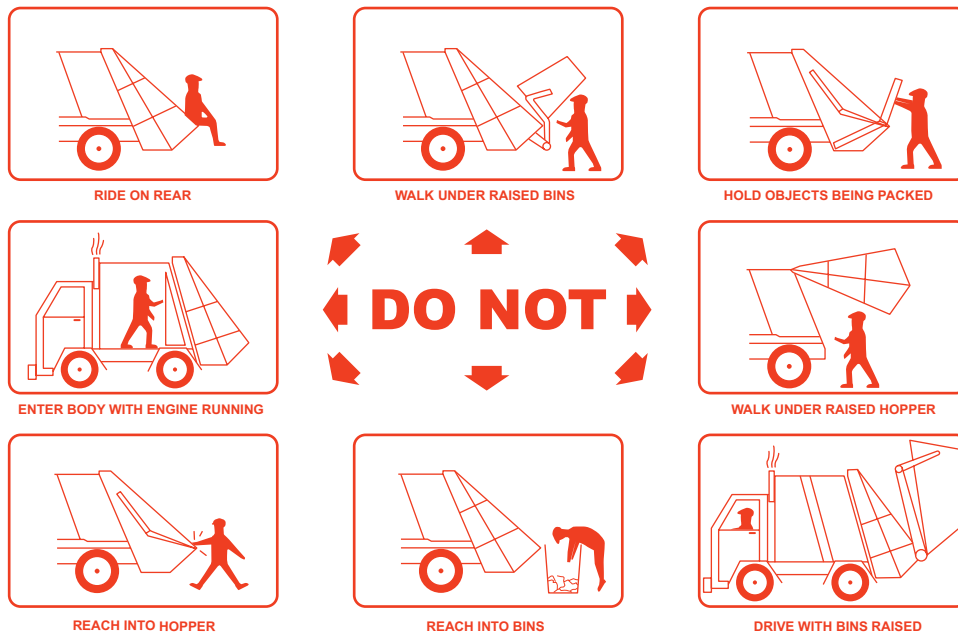
This chapter incorporates all the information contained in the 'Code of Practice for the safe operation of rear end loaders and refuse collection vehicles' issued by the Container Handling Equipment Manufacturers (CHEM).

It is everyone's responsibility to make sure that they and their colleagues work safely. The intention of these guidelines is to bring safety to every operative's attention. Read them very carefully and use them as a guide to good working practice at all times.

The guidelines contained in this manual are not definitive. There may be additional ways to make sure that operator organisations work safely and you must also follow any local rules and safe working practices that may apply.

2.2 Use of refuse collection vehicle

The refuse collection vehicle must only be used to collect and transport domestic and trade waste.



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SAFETY PRECAUTIONS

2

2.3 Safety symbol, warnings, cautions and notes

The following Safety Symbol is used throughout this manual to indicate information that is essential to Health and Safety.



The symbol applies to ALL information contained in this chapter.

All Safety Information MUST be strictly adhered to.

WARNINGS



WARNING:
A WARNING IS PRINTED IN THIS STYLE.

IT REFERS TO ANY PROCEDURE WHICH MUST BE FOLLOWED PRECISELY TO AVOID POSSIBILITY OF PERSONAL INJURY OR DEATH.

Cautions



Caution:
A Caution is printed in this style.

It refers to any procedure which must be followed to avoid damage to components or malfunction.

Notes

Note: A Note is printed in this style. It refers to essential information about any operation or event that is not a **WARNING** or a **Caution**.

2.4 Trained personnel

The vehicle may be dangerous in the wrong hands, and only suitably trained and authorised persons using approved safety equipment where relevant, should operate, service and repair this vehicle.

2.5 Use of these instructions

These instructions are only intended for use by trained and authorised personnel with the machinery for which this publication is applicable. They should not be used by any other persons, on any other machinery or for any other purpose.

2.6 Personal hygiene

Personal hygiene is important at all times, particularly for those working in the waste disposal environment where rats can breed and spread diseases such as LEPTOSPIROSIS.

Leptospirosis, or Weil's disease, is a form of jaundice with early stages similar to influenza. The infection sometimes enters the body through breaks in the skin, so thorough first aid treatment of all wounds is important.

Leptospirosis is carried in the urine of rats. If you have the slightest suspicion that you are working in a contaminated environment follow these rules rigidly:

1. Wear protective clothing at all times.
 2. Apply barrier creams before each work period.
- Note:** Preparations containing lanolin replace the natural skin oils which can be removed when washing.
3. After removing protective clothing wash it thoroughly and allow it to dry.
 4. Wash hands and forearms thoroughly after working and especially before eating and drinking.
 5. Wash every scratch, graze or cut of the skin, treat it with antiseptic, and cover it with a sterile dressing, e.g. plaster. This applies to ALL wounds; not just those suffered at work.
 6. If the vehicle's First-Aid kit requires replenishing report it to your supervisor.
 7. With any injury that is more than a scratch or slight cut, consult your doctor and mention the type of work you do.
 8. Obtain medical advice if skin disorders develop.
 9. At all visits to your doctor, mention the type of work you do and the environment you work under.
 10. Do not allow the inside of protective clothing to become soiled.
 11. Do not rub your mouth, nose or eyes when working.
 12. Do not wash skin with fuels, thinners or solvents.



2.7 Protective clothing

While operating the refuse collection vehicle, wear protective clothing complying with Health and Safety Legislation and Standards applicable to the country in which the vehicle is being used, including:

1. A boiler suit, or a two piece protective overall, not too loosely fitting and of a distinctive colour.
2. Protective boots or shoes with steel toe caps and insoles.
3. A hard protective hat.
4. Protective gloves.
5. Protective spectacles.
6. Goggles and particle mask if working in dusty conditions.
7. Reflective armbands or jacket should be worn when working on the road or in any other situation where there may be a hazard from moving vehicles or manually operated machinery.

2.8 General



WARNINGS:
ALWAYS REMEMBER THAT THE OLYMPUS TWIN PACK BODY HAS TWO SEPARATE TAILGATES AND TAILGATE MECHANISMS. THESE CAN WORK INDEPENDENTLY OF EACH OTHER.

WHEN YOU CROSS THE REAR OF THE VEHICLE MAKE SURE THAT YOU KNOW WHICH TAILGATE MECHANISM IS OPERATING.

THE CONTROLS FOR THE RIGHT-HAND BODY ARE ON THE RIGHT-HAND SIDE (TRAFFIC SIDE) OF THE VEHICLE. MAKE SURE THAT THE ROAD IS CLEAR BEFORE YOU STEP OUT TO OPERATE CONTROLS.

1. The operator of a refuse collection vehicle has a duty to ensure that the operatives understand the principles and procedures of operation and all relevant safety instructions.
2. It is forbidden to use a refuse collection vehicle if any of its safety devices is modified or not operating to specification.
3. It is essential to lock the vehicle doors, remove the keys and place warning notices when working on the vehicle or its mechanisms.
4. Operatives must never ride on any part of the vehicle except in the cab, or on the footboards, where fitted.
5. Operatives must not:
 - enter the body.
 - climb onto or walk on the roof.
 - climb into the tailgate.
 - climb into waste containers.
6. The refuse collection vehicle, its chassis-cab, bodywork, refuse compaction mechanism and any ancillary equipment, such as waste container lifting devices, must be correctly operated and maintained in accordance with the manufacturers' instructions at all times.
7. Never store refuse in the body - it is only to be used for collection and transportation.
8. When pressure washing the refuse collection vehicle, its chassis-cab, bodywork, refuse compaction mechanism and any ancillary equipment, such as waste container lifting devices, do not allow the jet nozzle to approach closer than 1 metre.



WARNING:
DO NOT DIRECT PRESSURE WASHER AT A PERSON. HIGH-PRESSURE WATER JETS CAN CAUSE INJURY.



Caution:
High-pressure water jets can cause severe damage to electrical equipment.



SAFETY PRECAUTIONS

2

9. Never operate the refuse collection vehicle and any supplementary devices, such as waste container lifting devices, unless:
 - You are a trained operative.
 - It is in a well-maintained condition with all systems operational and their safety features operating to specification.
10. The refuse collection vehicle must not be operated if any of its protective covers are missing or damaged. Such covers are essential to the safety of operating personnel as they protect them from potential hazards from moving components (i.e. cylinders) and ejection of refuse.
11. Do not exceed the plated axle and/or gross vehicle weights for the chassis-cab. All chassis-cabs have axle and gross vehicle weight information on a plate situated in the cab. It is important that gross vehicle weights are monitored carefully in the first few weeks of operation. If for any reason maximum plated weights are exceeded on a regular basis please contact Dennis Eagle Ltd., Service Department or local agent for advice.
12. Do not stare directly into the beams of high brightness LEDs, such as LED lamps and warning beacons; doing so may cause permanent damage to your eyes.

2.9 Before leaving the depot

Before leaving the depot check and ensure that:

1. There is no refuse, paper or flammable materials near the engine or exhaust. These could cause a fire when the engine is started. If necessary, tilt the cab (see Chassis-cab Manufacturer's Operator's Handbook) to make a thorough inspection.
2. The chassis and cab systems are working to specification: lights, windscreen wipers, tyre condition and pressures, etc. see the relevant chapter(s) of the Chassis-cab Operator's Manual.
3. All ancillary equipment is working to specification. See the relevant chapter(s) of the Equipment Manufacturer's Operator's Manual.
4. All safety circuits, interlocks and operational features are working to specification.
5. All marking plates are clean and clearly visible.
6. All warning instruction labels are clean and legible.
7. All audible and visual alarms are working to specification.
8. The following fluid levels are correct:
 - **Chassis-cab** - See Chassis-cab Operator's Handbook.
 - **Bodywork** - Hydraulic system oil level (see Service Manual)
9. The vehicle crew is trained in the safe operation of the machine and has suitable protective clothing.
10. The number of crew does not exceed the seating capacity of the vehicle cab.
11. The tailgates are properly locked to the body.
12. The 'Body Main' switch is in the OFF position with the key removed (see '4.2.1 Body main switch' on page 4-6).
13. The chassis, cab, bodywork and ancillary units, when fitted, and their systems are free from accumulated mud or debris from landfill, which could impair or damage the systems and render the vehicle unsafe and/or inoperable.



2.10 Travelling to collection point

While travelling to the collection point:

1. All crew members must be seated and wearing seat belts.
2. The tailgates must be properly locked to the body.
3. The 'Body Main' switch must be in the OFF position (see '4.2.1 Body main switch' on page 4-6).
4. Personal items (i.e. coats, lunch boxes, etc.) must be securely stowed in the cab - use coat hooks if provided.
5. Bottles, cans, etc. MUST NOT BE left on the cab floor as they can roll under the brake or clutch pedals causing an obstruction that can be dangerous.
6. Any waste container lifting devices must be in the stowed or travel position before moving the vehicle (refer to Waste Container Lifting Device Operator's Handbook).
 - When travelling over rough ground the waste container lifting device may be raised to avoid grounding. The rear lights MUST NOT be obstructed by leaving the waste container lifting device in a mid-position.

2.11 Collecting refuse

While collecting refuse:

1. All personnel must be familiar with the position, use and function of the 'Emergency stop' push-buttons.
2. Always keep the cab floor, access ladder and soles of footwear clean and free from debris.
3. Check that the road or pavement is clear of oncoming/overtaking vehicles, pedestrians or other obstructions before opening the cab door and stepping out. The crew must always exit from the kerb side of the vehicle.
4. Take particular care when stepping out from the rear of the vehicle to cross the road.
5. Use the signal buzzer regularly with a pre-determined signal to keep your driver informed.
6. Use the flashing warning beacons to warn people in the vicinity of your presence.
7. During continual stop/start operations be especially aware of other road users.
8. Be careful when loading glass, cover it with refuse before operating the compaction mechanism.
9. Ensure the packer plate blade covers all refuse before moving the vehicle.
10. Do NOT drive the vehicle with the cab door open.
11. Do NOT leave the vehicle unattended.
12. Do NOT under any circumstances leave the cab without applying the handbrake.
13. Do NOT reverse the vehicle without supervision.
14. Do NOT allow yourself to be distracted whilst operating the equipment.
15. Do NOT allow members of the public to approach the vehicle whilst the machine is in operation.
16. Do NOT remove objects from nor reach into the tailgate at any time during the compaction cycle.
17. Do NOT hold large objects whilst the packer blade chops them.
18. Do NOT overload the tailgate before packing.
19. Do NOT enter any part of the bodywork.
20. Do NOT adjust any hydraulic pressure or sequence valves - this may render the machine unsafe.
21. Do NOT load pressure containers.
22. Do NOT load television sets.
23. Do NOT load refrigerators containing CFC gases.
24. Do NOT load hot ashes or burning debris.



**WARNING:
IN CASE OF FIRE VACATE THE VEHICLE
AND CALL THE EMERGENCY FIRE SERVICE.**

25. Do NOT load automotive wet charged batteries.
26. Do NOT load known hazardous waste.



SAFETY PRECAUTIONS

2

While using a waste container lifting device to collect refuse:

27. Ensure that the waste container is undamaged and that the lid (if fitted) is closed.
28. Ensure that the waste container is not over-filled. The lid must be fully closed and contents must not protrude from the waste container.
29. Position the waste container correctly before operating the equipment.
30. Personnel must keep clear of the rear of the vehicle whilst the waste container lifting device is in operation.
31. The waste container may be stopped in any position by releasing the waste container lifting device 'Raise' button.
32. Any waste container lifting device equipment must be in the stowed or travel position before moving the vehicle (refer to Waste Container Lifting Device Operator's Handbook).
33. Do NOT attempt to empty waste containers or skips that are incompatible with the waste container lifting device fitted to the vehicle (refer to Waste Container Lifting Device Operator's Handbook).
34. Do NOT walk under or reach under raised waste containers.
35. Do NOT violently shake the waste container when depositing refuse. This may damage the waste container or the waste container lifting device and could result in a hazardous situation. If the refuse is jammed in the waste container, it should be lowered to the ground and the obstruction removed.
36. NEVER assist the waste container lifting device by hand. If the waste container is too heavy it should be lowered to the ground and the weight reduced.
37. Do NOT climb into waste containers or tailgate to re-arrange refuse.
38. Do NOT drive with waste containers suspended from the waste container lifting device.

Twin Pack loading:

39. Do NOT - use the OLTP by loading 1 side only. If only one waste type is to be collected both body cavities should be used especially if collecting high density materials eg wet green waste.
40. Unlike a conventional single compartment RCV the Twin Pack has 2 body volumes that can be independently loaded.
While this has obvious benefits when considering different waste stream collections it is important that the user of the RCV considers the implications of different waste types loaded into each body cavity, their associated densities and the possible impact on the vehicles driving and handling characteristics during its planned collection round and discharge logistics.

2.12 Travelling to discharge site

When travelling to the discharge site:

1. Always drive carefully, especially when the vehicle is fully loaded, as its handling and performance characteristics will have altered. The driver must take this change from unladen to laden condition into account.
2. The packer plate blade must cover the refuse.
3. The 'Body Main' switch must be in the OFF position (see '4.2.1 Body main switch' on page 4-6).
4. Crew members MUST be seated and wearing seat belts.
5. The tailgates must be properly locked to the body.
6. Personal items (i.e. coats, lunch boxes, etc.) must be securely stowed in the cab - use coat hooks if provided.
7. Bottles, cans, etc. MUST NOT BE left on the cab floor as they can roll under the brake or clutch pedals causing an obstruction that can be dangerous.
8. Any waste container lifting device equipment must be in the stowed or travel position before moving the vehicle (refer to Waste Container Lifting Device Operator's Handbook).
 - When travelling over rough ground the waste container lifting device may be raised to avoid grounding. The rear lights MUST NOT be obstructed by leaving the waste container lifting device in a mid-position.



2.13 At discharge site

At the discharge site:

1. Switch on the warning beacons before commencing the discharge operation.
2. Always follow the instructions specific to that site.
3. Only essential crew members should leave the cab during the discharge operation - if allowed by the discharge site instructions.
4. Ensure that you are familiar with the physical size of the vehicle, in particular the height with the tailgate and waste container lifting device, if fitted, raised.
5. Ensure that the ground/surface is level and firm before attempting to raise the tailgate - (see Tip Face Operational Guidelines).
6. On 35/65 and 40/60 bodies always discharge the Left-hand (Narrow) body before discharging the Right-hand (Wide) body.
7. Ensure tailgate area is clear before raising/lowering the tailgate.
8. Ensure tailgate area is clear before ejecting the load.
9. Do NOT go to the back of the vehicle at the tip face.
10. Do NOT walk under tailgate when it is being raised or lowered.
11. Do NOT walk under raised tailgate unless it is supported by its props.
12. Do NOT walk under a raised tailgate during the tailgate clear cycle.
13. Do NOT drive the vehicle with the tailgate raised.

2.14 Before leaving discharge site

Before leaving the discharge site ensure that:

1. There is no refuse, paper or flammable materials near the engine or exhaust. These could cause a fire when the engine is started. If necessary, tilt the cab (see Chassis-cab Manufacturer's Operator's Handbook) to make a thorough inspection.
2. The tailgate seals are free from debris and undamaged.
3. The tailgates are down and properly locked.
4. The vehicle is free from damage to its chassis-cab and bodywork.
5. The lamps used for the safe operation of the vehicle on the public highway are still functioning correctly, clean and visible.
6. All bodywork placards (e.g. number plates, marker plates, and warning instructions to other road users) are clean and clearly visible.
7. The 'Body Main' switch is in the OFF position (see '4.2.1 Body main switch' on page 4-6).
8. The vehicle is SAFE to continue.
9. The chassis, cab, bodywork and ancillary units, when fitted, and their systems are free from accumulated mud or debris from landfill, which could impair or damage the systems and render the vehicle unsafe and/or inoperable.

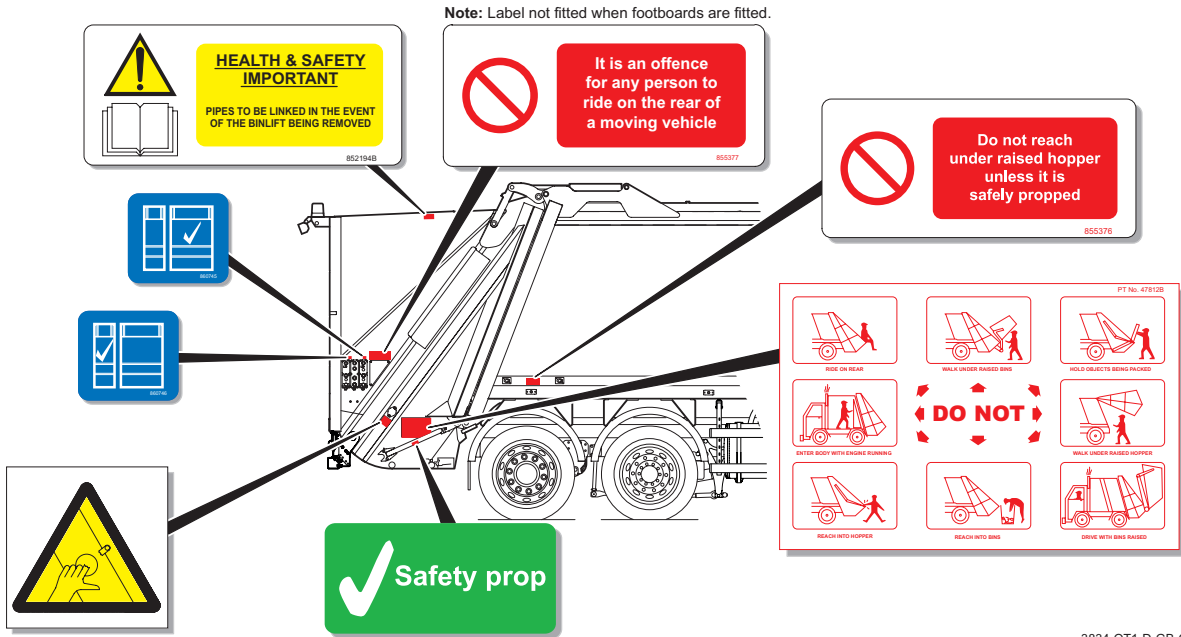


SAFETY PRECAUTIONS

2.15 Warning labels

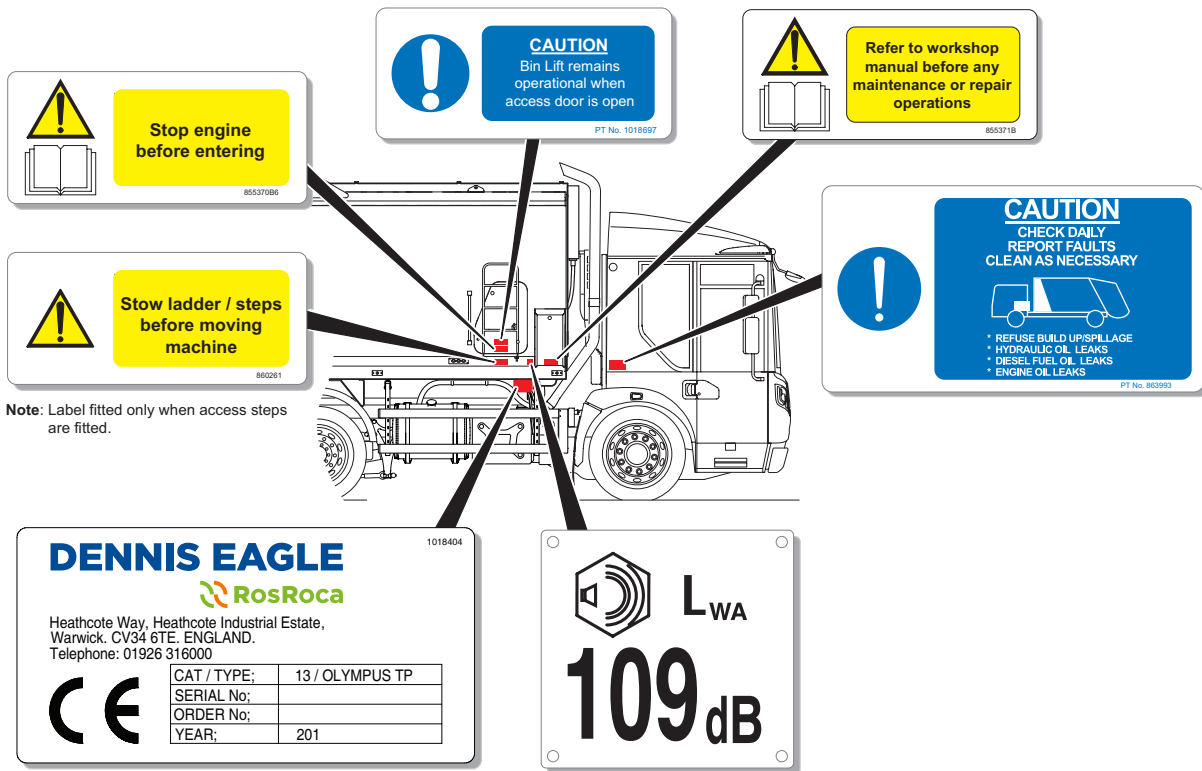
Warning labels (see Figs 2-1, 2-2, 2-3, 2-4, 2-5 and 2-6) are fixed to the body to:

- Warn operatives or maintenance personnel not to carry out actions which may cause death (red labels).
- Warn operatives or maintenance personnel of actions which may cause injury or damage to the bodywork operation (yellow labels).
- Provide important safety information (blue labels).
- Identify safety fittings (green labels).



3834-OT1-D-GB-G2

Fig. 2-1 Warning labels; right-hand rear of refuse collection bodywork



3835-OT1-D-GB-G2

Fig. 2-2 Warning labels; right-hand front of refuse collection bodywork

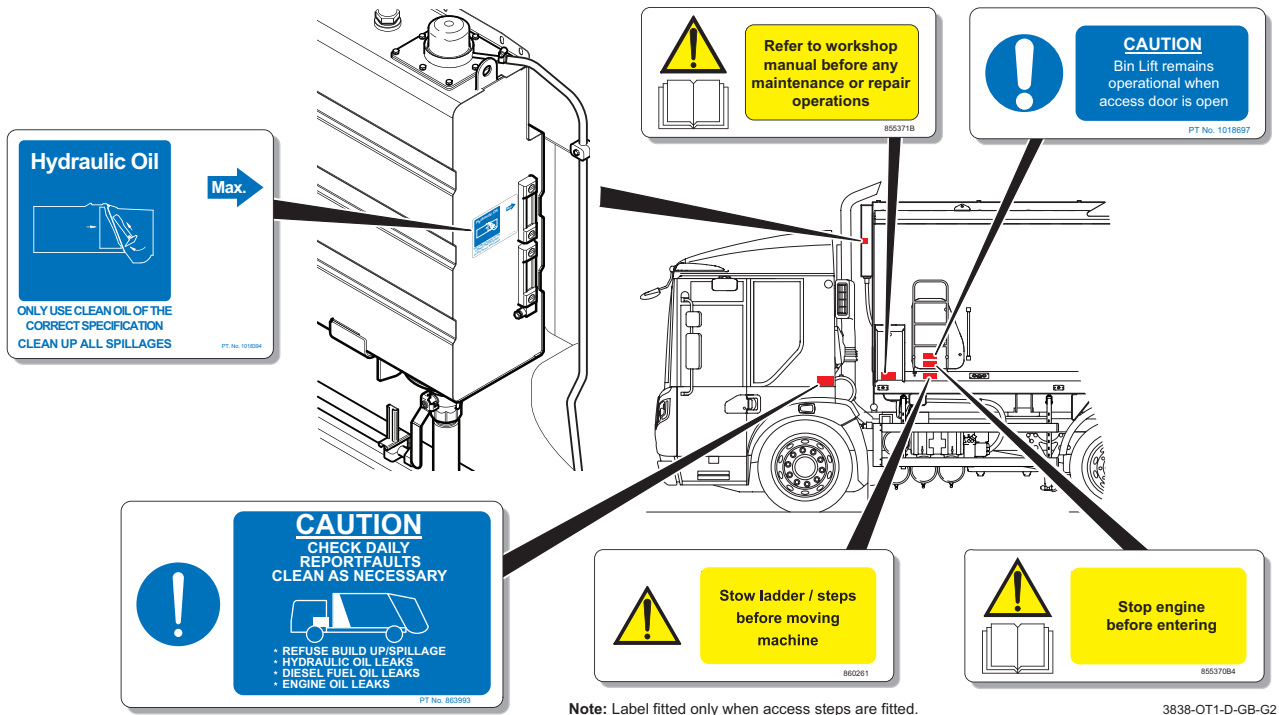


Fig. 2-3 Warning labels; left-hand front of refuse collection bodywork

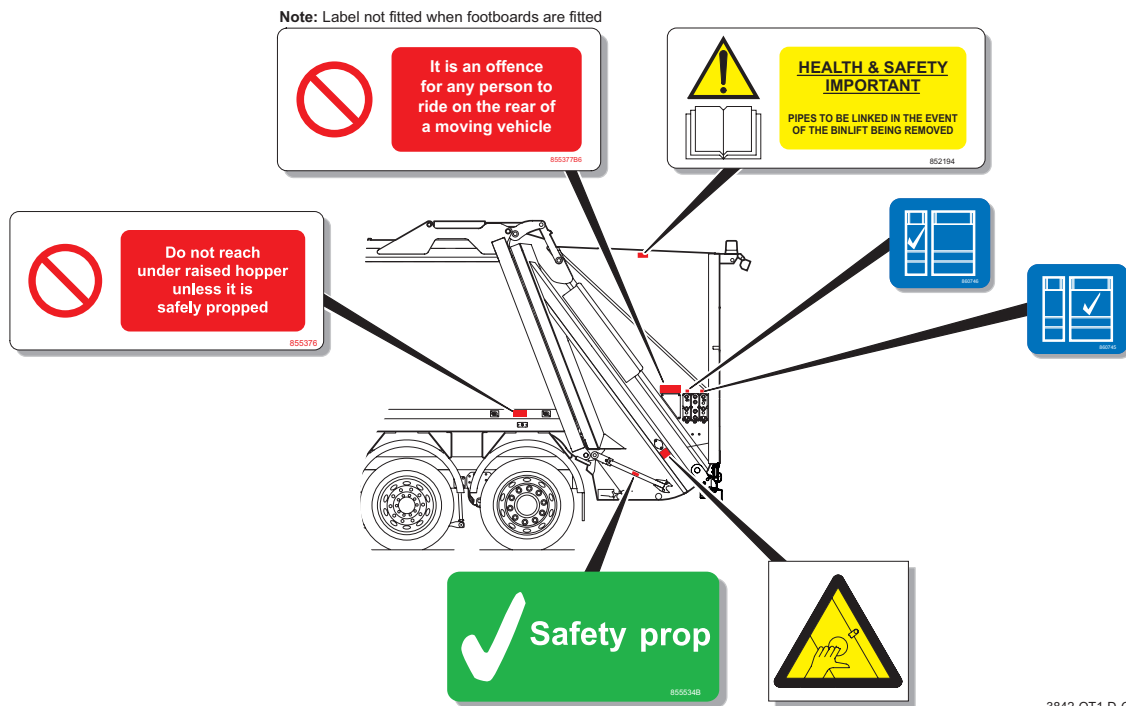
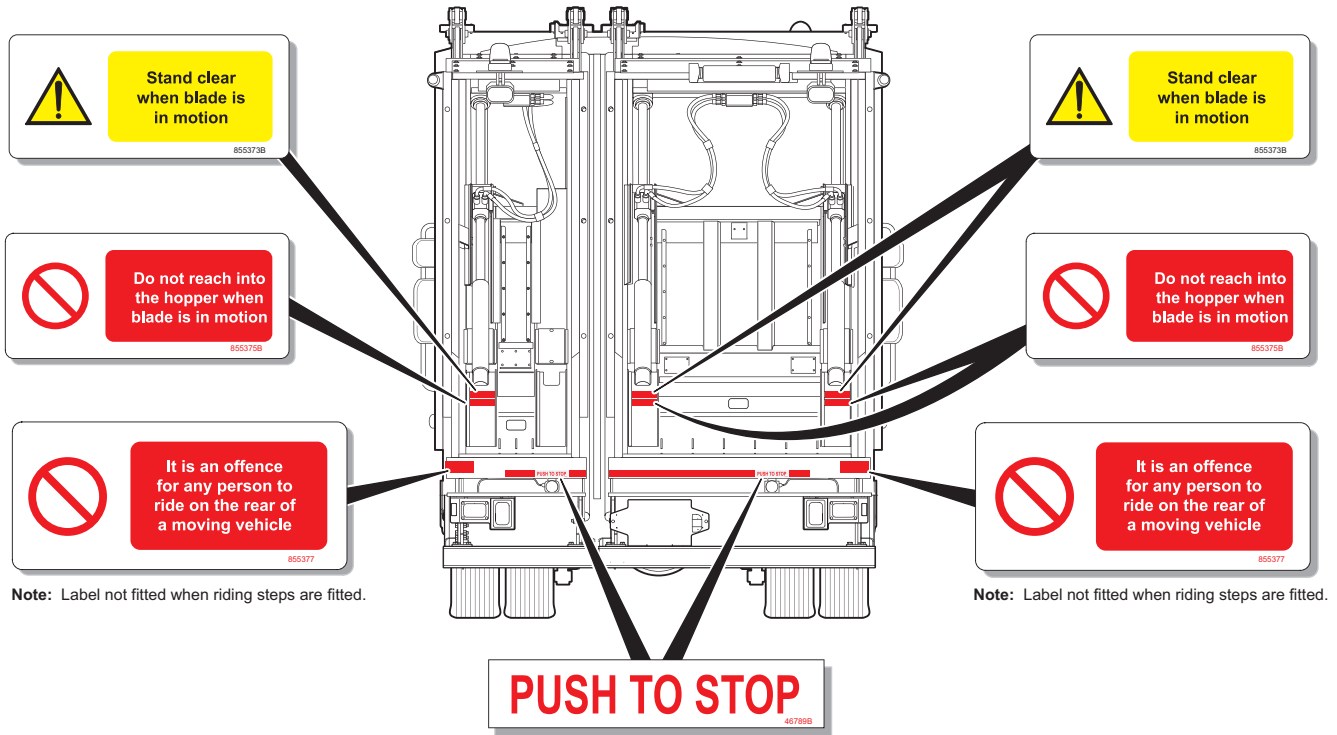
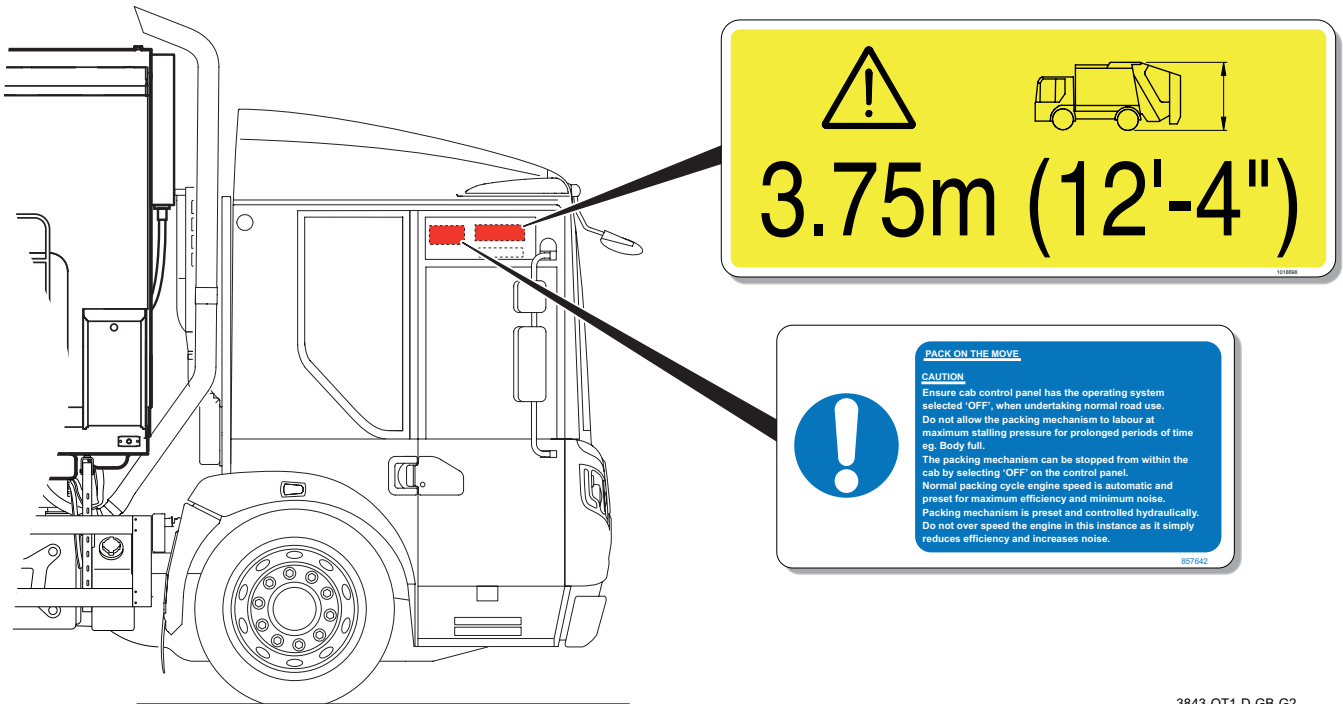


Fig. 2-4 Warning labels; left-hand rear of refuse collection bodywork



3844-OT1-D-GB-G2

Fig. 2-5 Warning labels; rear of collection bodywork



3843-OT1-D-GB-G2

Fig. 2-6 Warning labels; cab



Olympus Twin Pack Operator's Handbook

CONTENTS	PAGE
3 How it works	3-3
3.1 Body	3-3
3.2 Tailgate	3-3
3.2.1 Compaction mechanism.....	3-3
3.2.2 Operating cycle.....	3-4
3.2.3 Discharging operation.....	3-5
3.3 Hydraulic system	3-6
3.3.1 Hydraulic pump.....	3-6
3.3.2 Hydraulic tank and valve modules.....	3-6
3.3.3 Hydraulic cylinders	3-6



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3 How it works

3.1 Body

The body is a fabricated steel box which is divided by an internal bulkhead to provide two separate body compartments; the Left-hand body and the Right-hand body.

Each body (1) is closed by a movable ejection plate (2) at the front and by a tailgate at the rear.

Bodies are of varying capacity according to individual vehicle specification.

Refuse is contained within the body during collection and transportation to the tip.

The refuse is discharged from the body by the ejection plate (2) operated by the ejection cylinder.

3.2 Tailgate

Two tailgates are fitted, one for each body compartment.

Each tailgate (4) is pivoted at the top rear of the body and is raised and lowered by two hydraulic cylinders, the tailgate raise/lower cylinders.

The tailgate consists of a hopper (7), into which refuse is loaded, and the compaction mechanism, which transfers the refuse from the hopper into the body and at the same time compacts it.

The tailgate provides a mounting point for the waste container lifting device mechanism when fitted to the vehicle.

3.2.1 Compaction mechanism

The compaction mechanism comprises two parts:

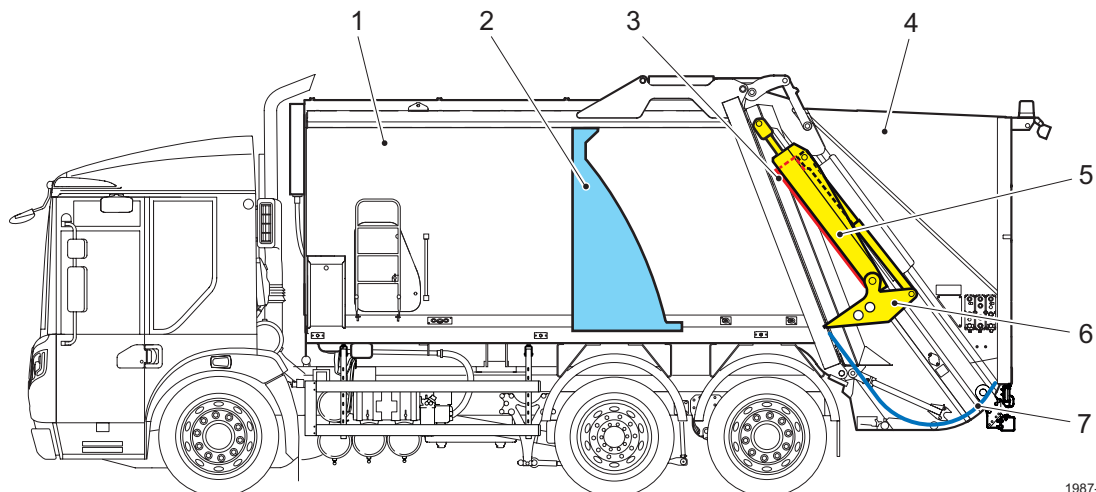
- The carriage plate (5)
This travels in slideways and is operated by two hydraulic cylinders**, the carriage plate cylinders.
- The packer plate (6)
This is hinged on the carriage plate and is operated by two hydraulic cylinders**, the packer plate cylinders.

** On 35/65 and 40/60 bodies, the left-hand (narrow) body compaction mechanism uses one carriage plate cylinder and one packer plate cylinder.

The packer plate and carriage plate compact the refuse that has been emptied into the hopper between the ejection plate (2) in the body and the refuse retaining plate (3) in the tailgate.

When the body is empty, the ejection plate is at the rear of the body. As refuse is loaded into the body, the ejection plate moves forwards in the body.

As the load pushing against the ejection plate increases, the hydraulic system controls its forward movement in the body to give a uniformly compressed load.



1987-01-OT1-GB-G2

Fig. 3-1 Major operating components

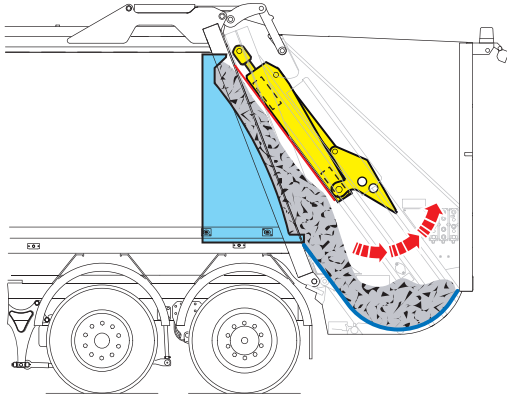
1. Body.
2. Ejection plate.
3. Refuse retaining plate.
4. Tailgate.
5. Carriage plate.
6. Packer plate.
7. Hopper.



3.2.2 Operating cycle

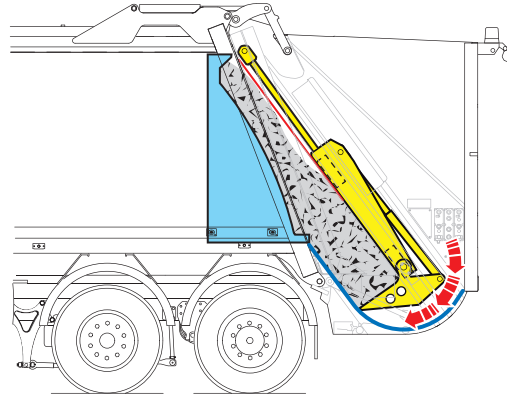
The compaction mechanism operating cycle is divided into four events:

1. The packer plate opens.



1975-01-OT1-GB

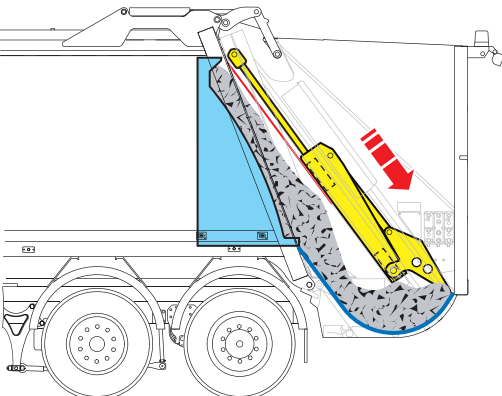
3. The packer plate closes.



1977-01-OT1-GB

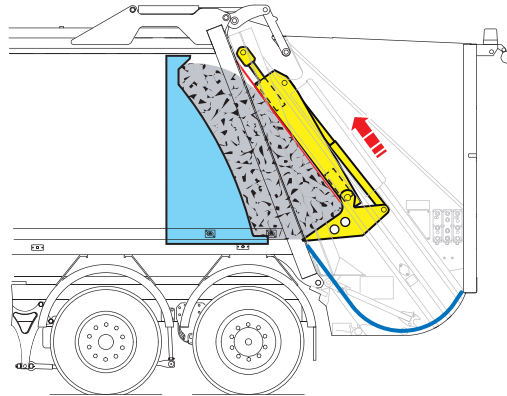
The packer plate encloses the refuse and sweeps it from the hopper.

2. The carriage plate moves down into the hopper.



1976-01-OT1-GB

4. The carriage plate moves up.



1978-01-OT1-GB

The packer plate and carriage plate compress the refuse in the body between the ejection plate in the body and the refuse retaining plate in the tailgate. As more refuse is packed into the body, the ejection plate moves towards the front of the body.

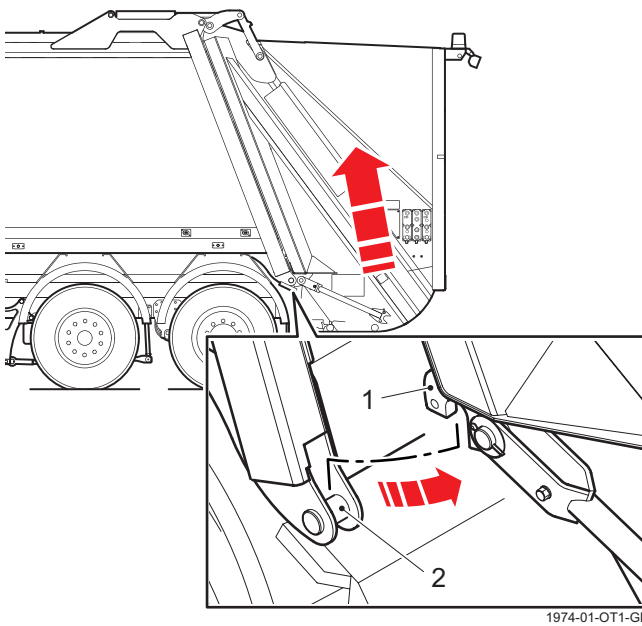


3.2.3 Discharging operation

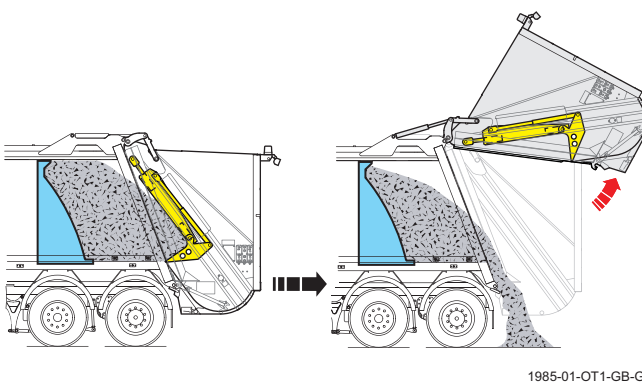
Discharging collected refuse from the body involves four operations:

1. Raising the tailgate.

The tailgate together with any waste container lifting device (if fitted) is raised clear of the rear of the body. As the tailgate begins to raise, it first moves up the rear face of the body until a hook (1) mounted on each side of the tailgate has disengaged from a pin (2) mounted on each side of the body. At this point the tailgate is 'Out-of-locks'.

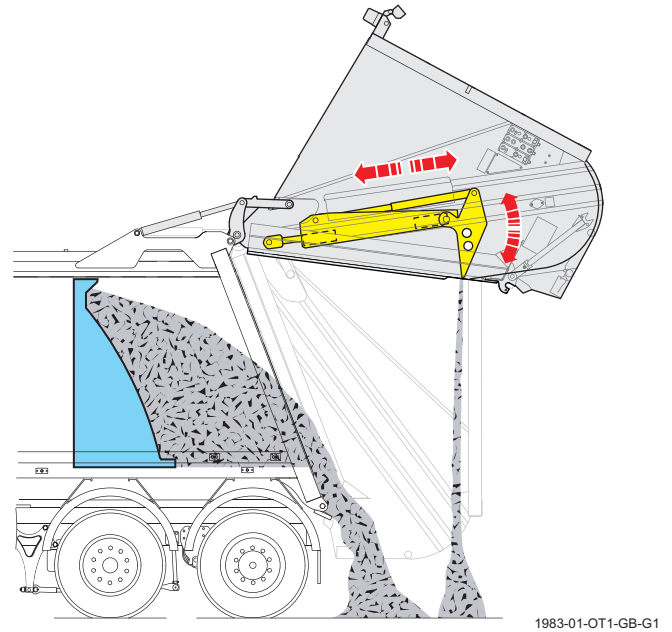


The tailgate then rotates about the tailgate pivots mounted in the roof of the body until it reaches its fully raised position.

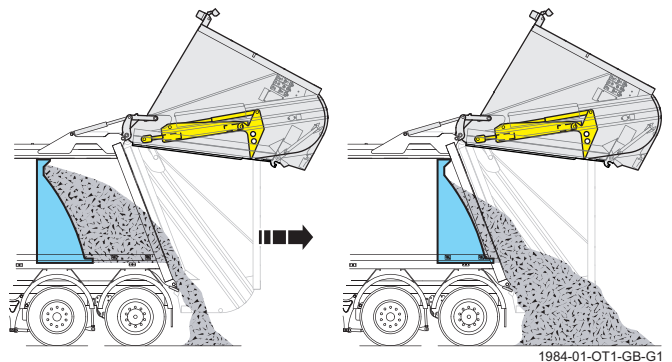


2. Tailgate clear cycle.

When the 'Tailgate clear cycle' has been enabled, the compaction mechanism will perform one cycle immediately the tailgate reaches full height to clear any accumulation of refuse from the tailgate hopper.



3. Discharging.



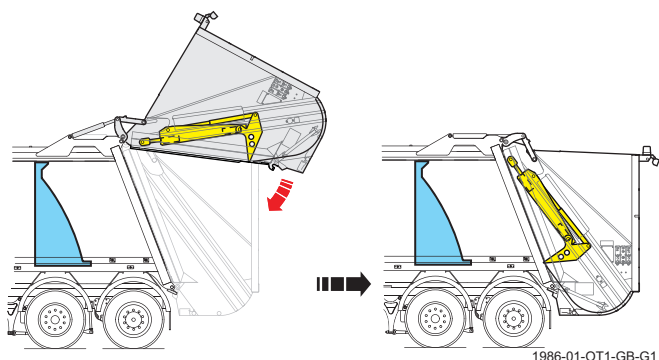
The ejection plate pushes the refuse out of the rear of the body.



HOW IT WORKS

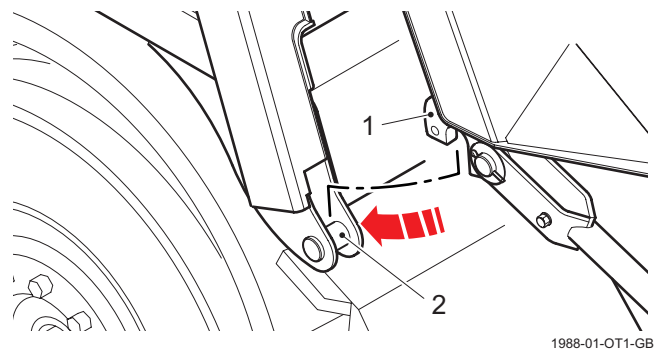
4. Closing the tailgate.

3



The tailgate together with any waste container lifting device (if fitted) is lowered onto the rear of the body, mechanically locking the tailgate to the body.

As the tailgate lowers, it rotates about the tailgate pivots mounted in the roof of the body until it makes contact with the rear face of the body and then slides down the body until a hook (1) mounted on each side of the tailgate engages a pin (2) mounted on each side of the body, locking the tailgate to the body.



3.3 Hydraulic system

The compaction, tailgate lifting and ejection mechanisms for each body are operated by an hydraulic system comprising a tank, pump, control valves and hydraulic cylinders.

3.3.1 Hydraulic pump

Hydraulic power is supplied to the system by one or more pumps driven by a Power Take-Off (PTO).

All Dennis Eagle Elite chassis-cab have a permanently driven PTO installed on the gearbox.

Where the Olympus Twin Pack body is mounted on other manufacturers' chassis-cab, the PTO is installed to manufacturer's instructions and may be gearbox mounted or engine driven via timing cover gears.

3.3.2 Hydraulic tank and valve modules

The body hydraulic pack, comprising hydraulic tank and valve module, is installed in the front of the body behind the cab. The cab must be tilted to reach the hydraulic pack.

A tailgate hydraulic valve module is located in the roof of each tailgate.



Caution:
Only authorised personnel should adjust or maintain these units.

3.3.3 Hydraulic cylinders

All the hydraulic cylinders used in the Olympus Twin Pack body range are double-acting, that is they are hydraulically powered out (extension) and hydraulically powered in (retraction).



Olympus Twin Pack Operator's Handbook

CONTENTS	PAGE
4 Operator's controls	4-3
4.1 Control location	4-3
4.2 Cab control station.....	4-4
4.2.1 Body main switch.....	4-6
4.2.2 Body discharge selector switch	4-6
4.2.3 Warning beacon switch (if fitted).....	4-7
4.2.4 Tailgate out of locks/autobrake interlock override switch (option).....	4-7
4.3 Audible warning devices	4-8
4.4 Neutral interlocks.....	4-8
4.5 Cab control panel.....	4-9
4.5.1 Switching cab control panel on.....	4-10
4.5.2 Screen brightness	4-11
4.5.3 Body system controls.....	4-12
4.5.4 Body system off.....	4-13
4.5.5 Body system run.....	4-13
4.5.6 Body discharge - Cab control panel.....	4-14
4.5.7 Body discharge - External discharge control panel (option).....	4-14
4.6 Warning pictograms.....	4-15
4.7 Calendar and clock.....	4-18
4.7.1 Adjusting the calendar and clock.....	4-18
4.8 Switches.....	4-18
4.8.1 Maintenance	4-20
4.8.2 Information	4-22
4.8.3 Body weight.....	4-24
4.8.4 Compaction mechanism multi-cycle adjustment	4-26
4.8.5 Compaction rate adjustment.....	4-30
4.8.6 Warning beacon switch	4-33
4.8.7 Work lamp switch	4-34
4.8.8 Green switch	4-35
4.8.9 Tailgate clear selection.....	4-35
4.8.10 System run.....	4-36
4.8.11 System off	4-36
4.8.12 Discharge controls.....	4-37
4.8.13 Body system run controls	4-38
4.8.14 External discharge controls	4-39
4.8.15 In-Cab discharge controls.....	4-39
4.8.16 External discharge control panel (option)	4-40
4.8.17 Tailgate raise	4-41
4.8.18 Tailgate clear cycle	4-42
4.8.19 Eject	4-42
4.8.20 Retract.....	4-43

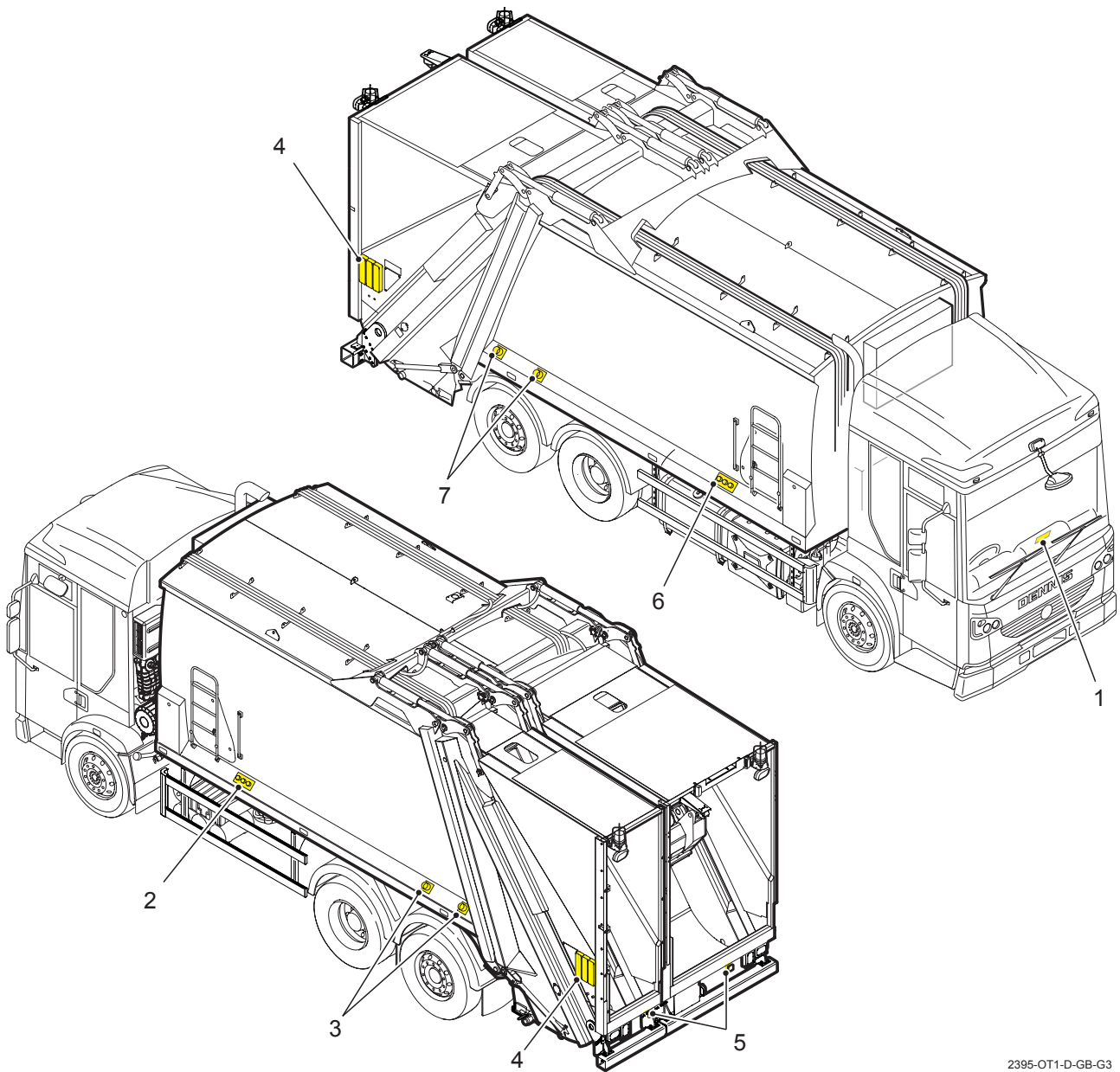


4.8.21	Lower tailgate to 1 metre	4-43
4.8.22	Tailgate lowering control panel.....	4-44
4.9	Compaction mechanism control station	4-45
4.9.1	Multi-cycle start switch.....	4-46
4.9.2	Signal push-button (black).....	4-47
4.9.3	Rescue push-button (yellow).....	4-47
4.9.4	Start pack cycle push-button (green).....	4-48
4.10	Packing sequence control panel (option)	4-50
4.10.1	Carriage plate down.....	4-50
4.10.2	Carriage plate up.....	4-50
4.10.3	Open packer plate	4-51
4.10.4	Close packer plate	4-51
4.11	Emergency stop push-buttons	4-52
4.11.1	Resetting an emergency stop push-button.....	4-52



4 Operator's controls

4.1 Control location



2395-OT1-D-GB-G3

Operator's controls are located at the following points on the vehicle:

1. Cab control station (see '4.2 Cab control station' on page 4-4).
2. External discharge control panel, left-hand body* (see '4.8.16 External discharge control panel (option)' on page 4-40).
3. Tailgate lowering control panel, left-hand body (see '4.8.22 Tailgate lowering control panel' on page 4-44).
4. Compaction mechanism control station (see '4.9 Compaction mechanism control station' on page 4-45).
5. Emergency stop push-buttons (Open-system only) (see '4.11 Emergency stop push-buttons' on page 4-52).
 - If a waste container lifting device is fitted, the 'Emergency stop' push-buttons are mounted on the waste container lifting device frame.
6. External discharge control panel, right-hand body*, (see '4.8.16 External discharge control panel (option)' on page 4-40).
7. Tailgate lowering control panel, right-hand body (see '4.8.22 Tailgate lowering control panel' on page 4-44).

* = Optional features.



4.2 Cab control station

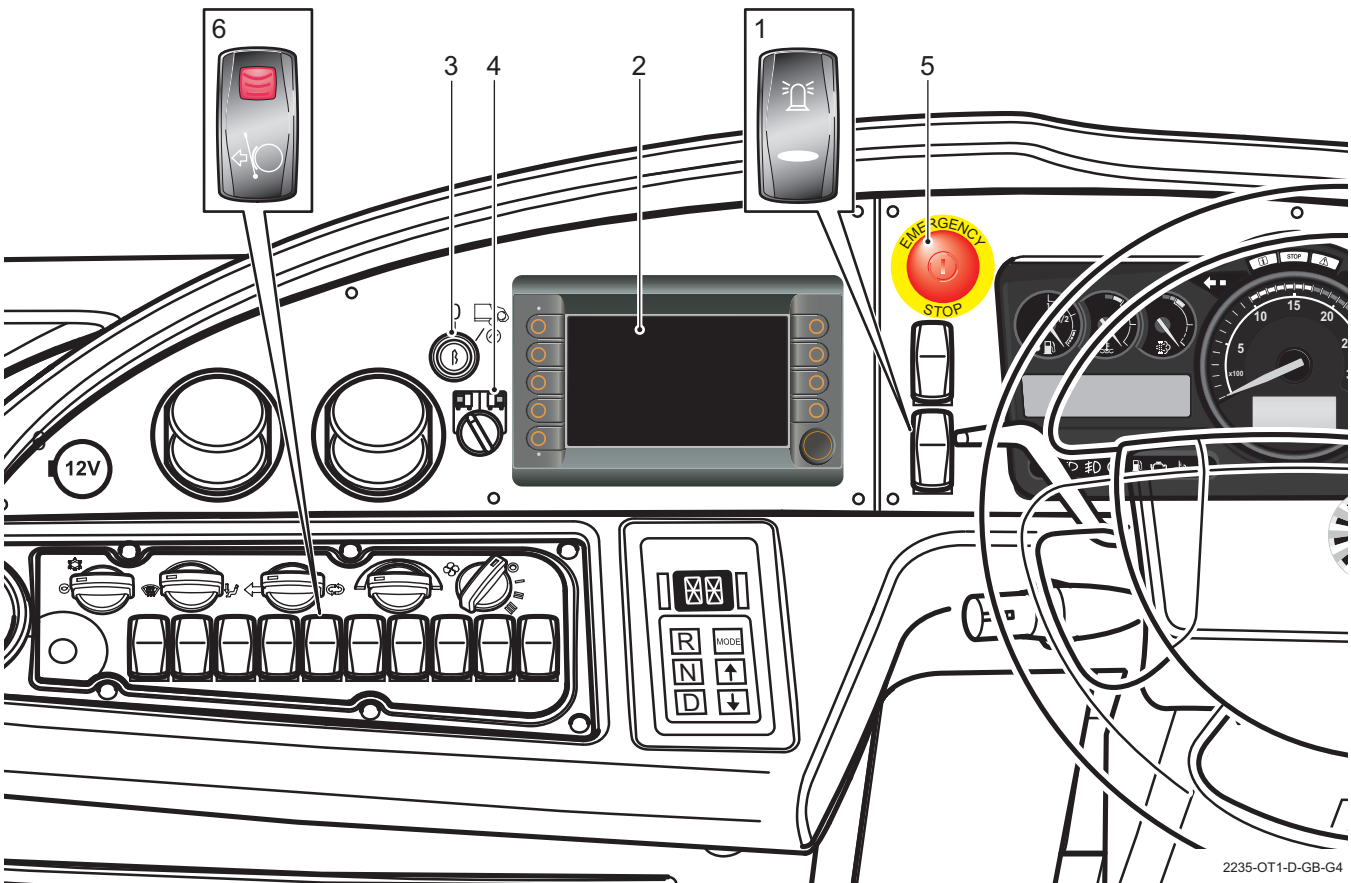
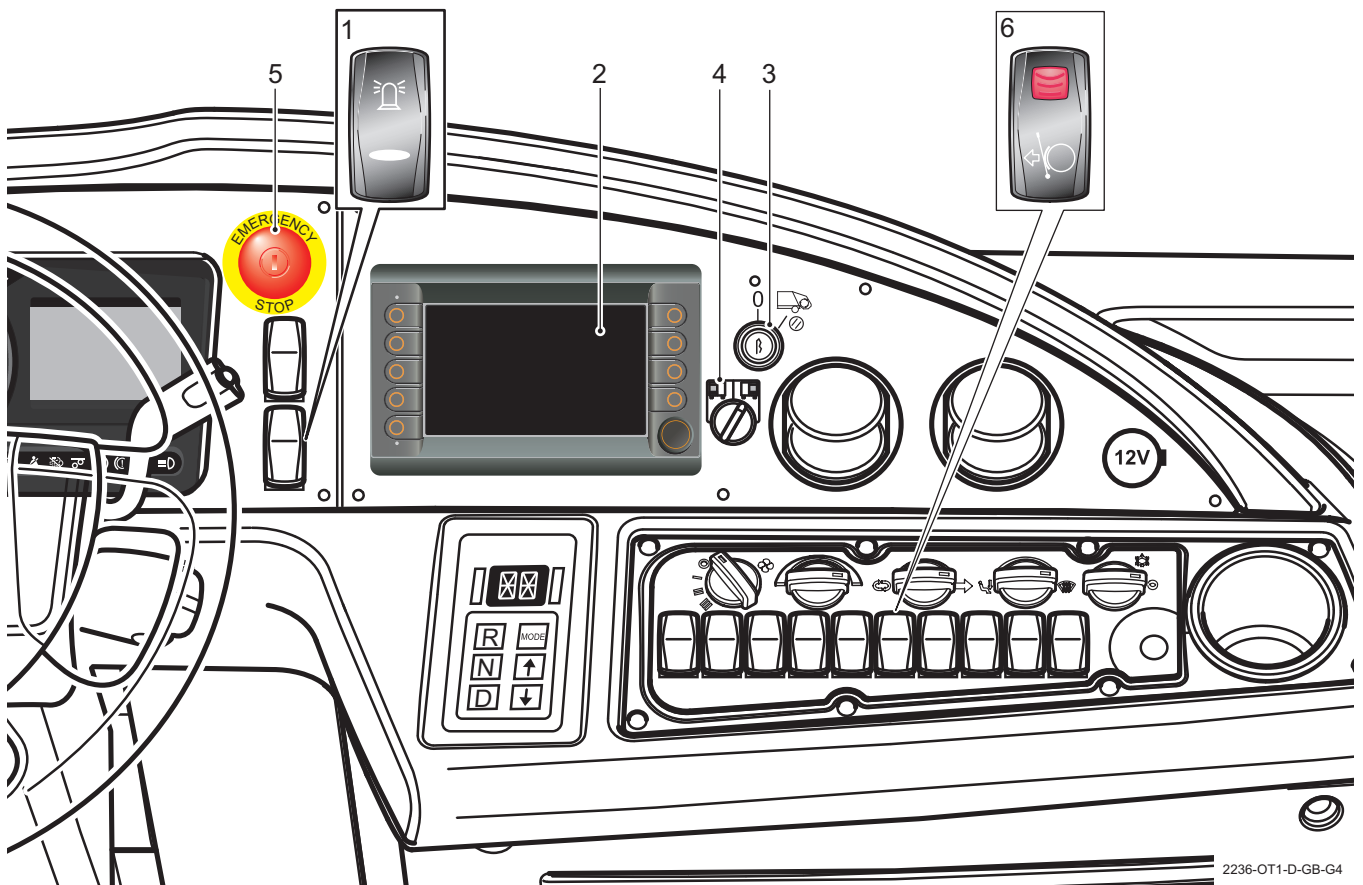


Fig. 4-1 Cab control station, Dennis Eagle Elite 6 chassis-cab, right-hand drive

The cab control station (see Fig. 4-1 & Fig. 4-2) comprises the following controls mounted on the fascia of Dennis Eagle Elite 6 vehicles:

1. Warning beacon switch (see '4.2.3 Warning beacon switch (if fitted)' on page 4-7).
2. Cab control panel (see '4.5 Cab control panel' on page 4-9).
3. Body main switch (see '4.2.1 Body main switch' on page 4-6).
4. Body discharge selector switch.
5. Emergency stop push-button (see '4.11 Emergency stop push-buttons' on page 4-52).
6. Tailgate out-of-locks/autobrake interlock override switch (Optional) (see '4.2.4 Tailgate out of locks/autobrake interlock override switch (option)' on page 4-7).

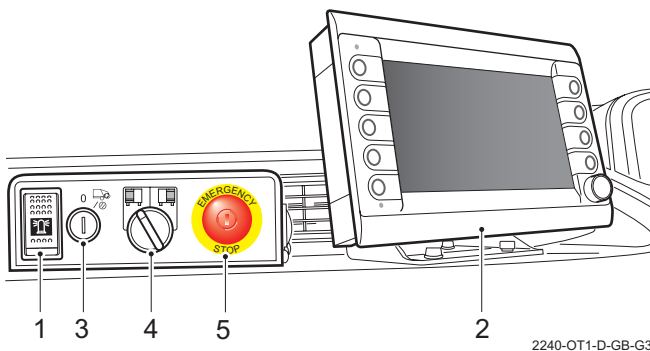


2236-OT1-D-GB-G4

Fig. 4-2 Cab control station, Dennis Eagle Elite 6 chassis-cab, left-hand drive

When the Olympus Twin Pack refuse collection bodywork is fitted on chassis-cab other than the Dennis Eagle Elite 6 vehicles, the cab control station (see Fig. 4-3) normally comprises:

- The cab control panel mounted on top of the fascia.
- A switch panel mounted on top or in the fascia, dependent on chassis-cab type.



2240-OT1-D-GB-G3

Fig. 4-3 Cab control station, non-Dennis Eagle Elite 6 chassis-cab



4.2.1 Body main switch

Controls the operation of the body control electrical system.

OFF:



Switches the body control electrical system off.

The key must be in the off position before switching the ignition on.

The key must be in the off position before it can be removed.

RUN:



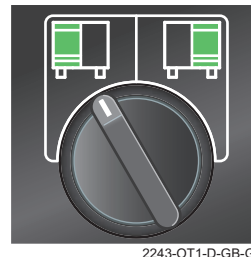
Switches the body control electrical system on (see '4.5.3 Body system controls' on page 4-12).

This switch must be turned off and then on again to energise the body control system after the following:

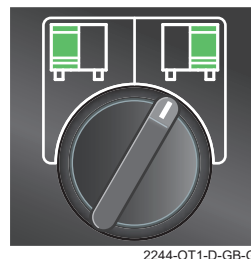
- When an 'Emergency stop' push-button has been reset.
- After a 'Rescue' push-button has been operated.
- If the cab control panel does not initialise.

4.2.2 Body discharge selector switch

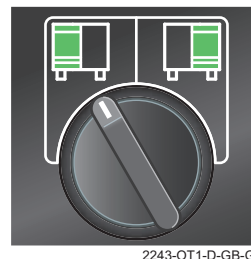
Controls which body is discharged and prevents both bodies being discharged simultaneously.



WARNING:
ON 35/65 AND 40/60 BODIES ALWAYS DISCHARGE THE LEFT-HAND (NARROW) BODY BEFORE DISCHARGING THE RIGHT-HAND (WIDE) BODY.



Enables right-hand body discharge controls and disables left-hand body discharge controls.



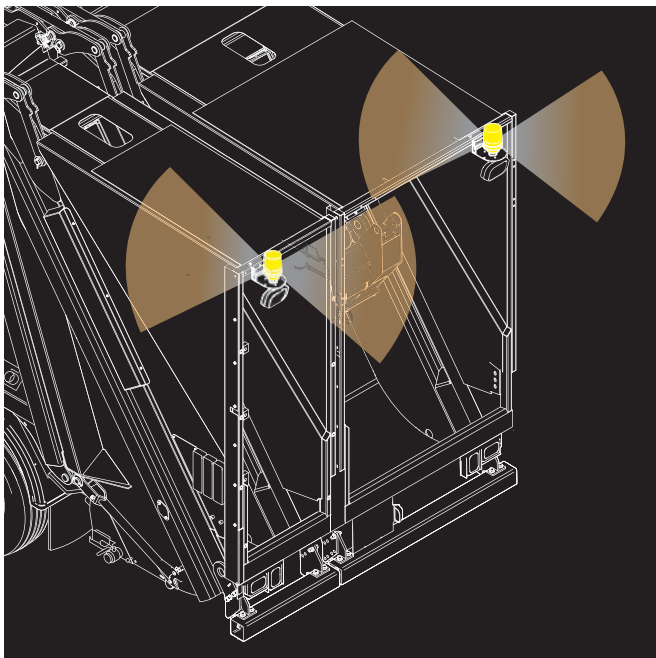
Enables left-hand body discharge controls and disables right-hand body discharge controls.



4.2.3 Warning beacon switch (if fitted)



Switches the warning beacons fitted on the tailgate and front of body or on cab (if fitted) on and off.

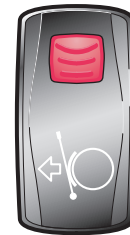


2383-OT1-D-GB-G2

The warning beacons are also controlled by a switch function on the cab control panel (see '4.8.6 Warning beacon switch' on page 4-33).

This warning beacon switch overrides the equivalent switch function in the cab control panel.

4.2.4 Tailgate out of locks/autobrake interlock override switch (option)

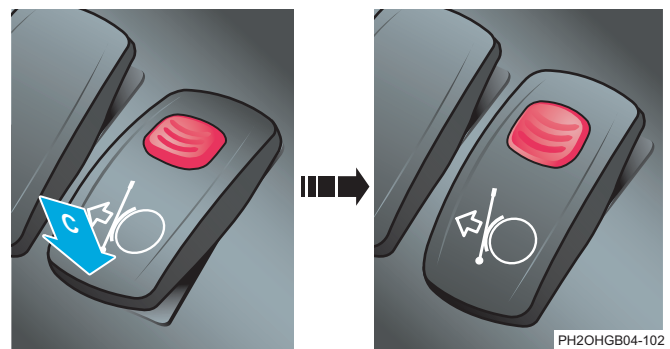
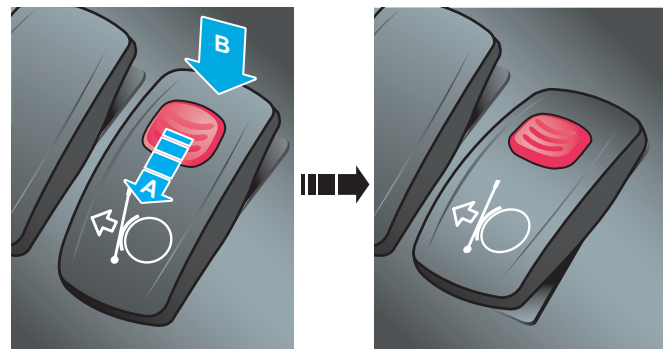


Pressing the 'Tailgate out-of-locks'/autobrake interlock override switch enables the driver to override the 'Tailgate out-of-locks/autobrake interlock in the event of an emergency (see '5.5 Tailgate out of locks/autobrake interlock (option)' on page 5-21).

The switch incorporates a safety catch to prevent accidental operation.

To operate the switch, press the red safety catch into the switch (A) and then press the front of the switch downwards (B).

To reset the switch, press the rear of the switch downwards (C); the safety catch automatically resets.



PH20HGB04-102



4.3 Audible warning devices

Emergency stop operated buzzer

If any 'Emergency stop' switch is operated, a loud pulsating buzzer will be heard in the cab.

Tailgate signal buzzer

If any one of the signal switches on the compaction mechanism control panels are operated, a continuous buzzer will be heard in the cab.

Tailgate out-of-locks buzzer

When either tailgate is out of its locks and any gear is selected, a high pitched continuous buzzer will be heard in the cab.

Waste container lifting device down buzzer

When the waste container lifting device hoist is too low for safe driving, a high pitched continuous buzzer will be heard in the cab.

4.4 Neutral interlocks

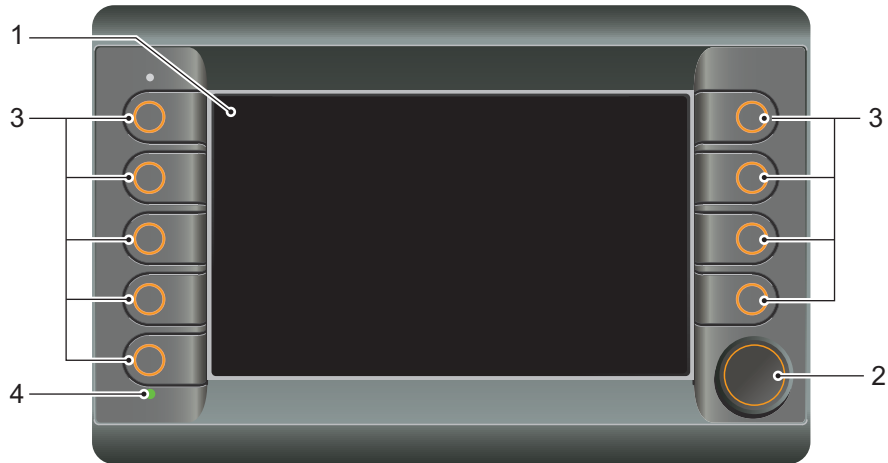
On chassis-cab fitted with an automatic transmission, an interlock stops the compaction cycle unless the gearbox is in neutral.

After the compaction cycle has started it is possible to move the vehicle, allowing the cycle to continue until complete.

An interlock prevents tip functions operating unless the gearbox is in neutral.



4.5 Cab control panel



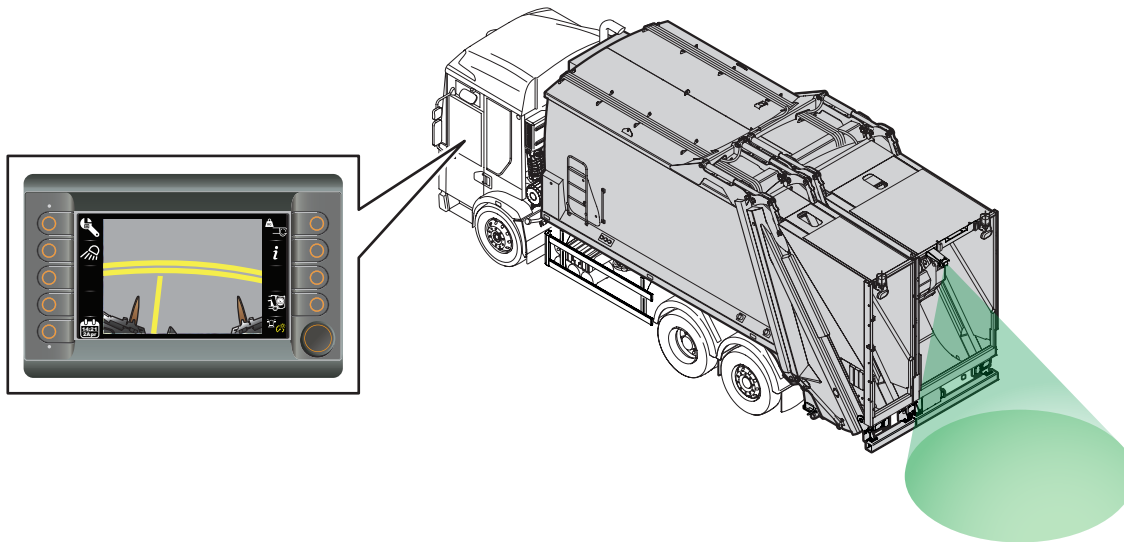
2254-OT1-D-GB-G1

The cab control panel is mounted in the fascia on all Dennis Eagle Elite 6 chassis-cab. It comprises the following components:

1. Screen.
2. Encoder control.
3. Operating switches.
4. Status light.

The control panel comprises a full colour screen. The screen operates as the monitor for the rear view camera and, at the same time, a control panel for the body system functions.

Note: An optional monitor can be fitted for dedicated cameras.



2237-OT1-D-GB-G4



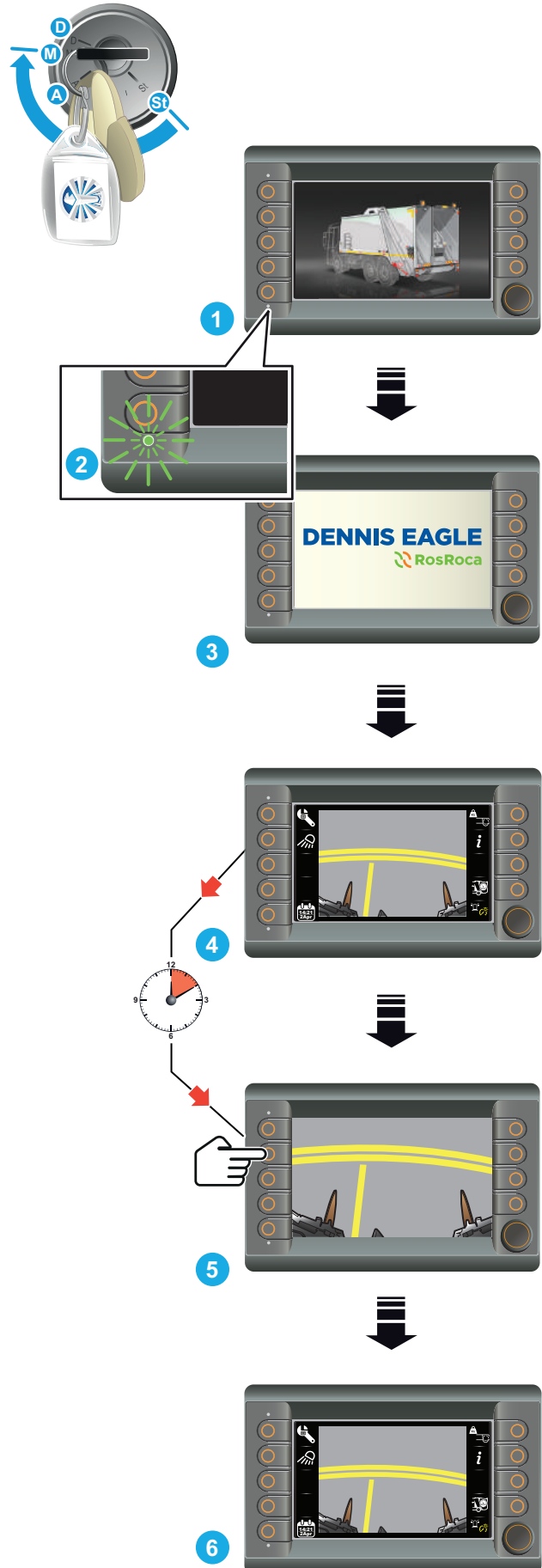
4.5.1 Switching cab control panel on

When the ignition is switched on, the cab control panel will first carry out a self test sequence during which time the screen displays a picture of a Dennis Eagle refuse collection vehicle (1) and the status lamp flashes green (2).

As soon as it has completed this, the screen will briefly show the manufacturing company logo (3) and then the 'Body system off' control screen (4).

If no activity, i.e. if none of the cab control panel switches are operated, occurs for 10 seconds after the ignition is switched on, the whole of the screen with show the view from the rear view camera (5).

If any one of the cab control panel switches are operated while the whole of the screen is showing the view from the rear view camera, the screen will display the 'Body system off' control screen (6).



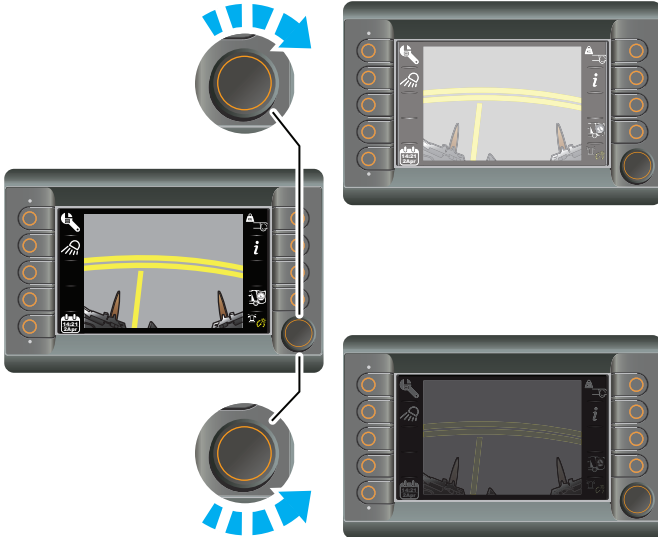
2748-DS001-OT1-D-GB-G1



4.5.2 Screen brightness

Turning the encoder control knob adjusts the brightness of the screen.

- Turning the knob clockwise brightens the screen.
- Turning the knob counter-clockwise darkens the screen.





4.5.3 Body system controls

Control of the body system functions is achieved using 4 screen mode displays:

Body system off

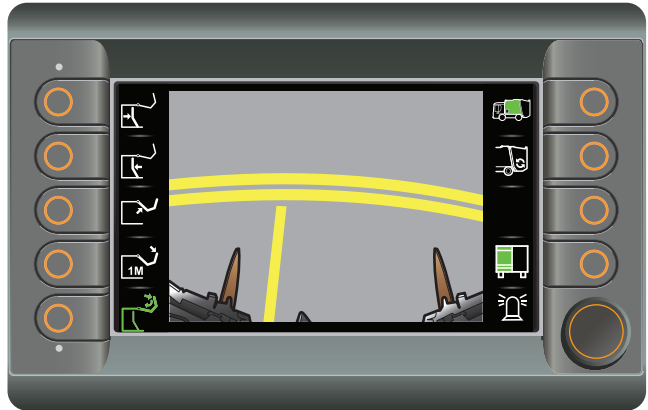
Disables the compaction mechanism controls (see '4.8.11 System off' on page 4-36).

Body discharge - Cab control panel

Energises the body discharge controls on the cab control panel (see: '4.8.12 Discharge controls' on page 4-37 and '4.8.15 In-Cab discharge controls' on page 4-39).



2241-OT1-D-GB-G4



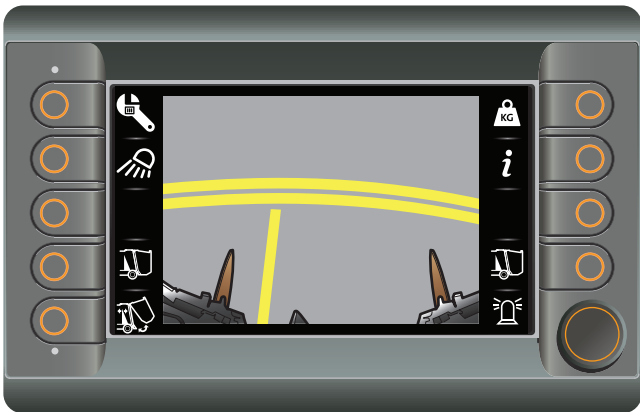
2249-OT1-D-GB-G3

Body system run

Energises the compaction mechanism controls (see '4.8.13 Body system run controls' on page 4-38).

Body discharge - External discharge control panel (option)

Energises the body discharge controls on the external discharge panel, when fitted (see '4.8.16 External discharge control panel (option)' on page 4-40).



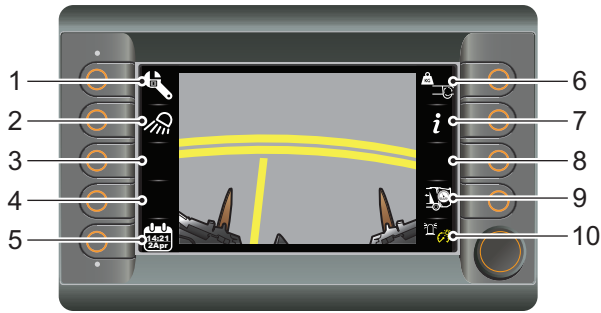
2248-OT1-D-GB-G6



2250-OT1-D-GB-G3

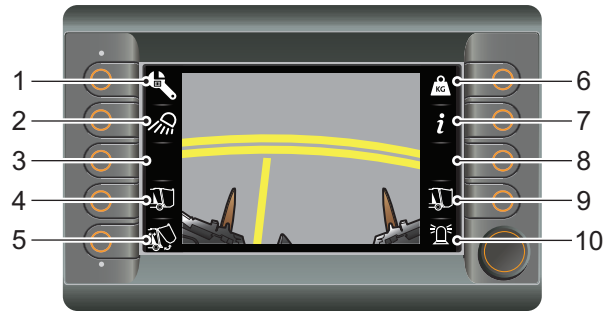


4.5.4 Body system off



























2257-OT1-D-GB-G3

4.5.5 Body system run



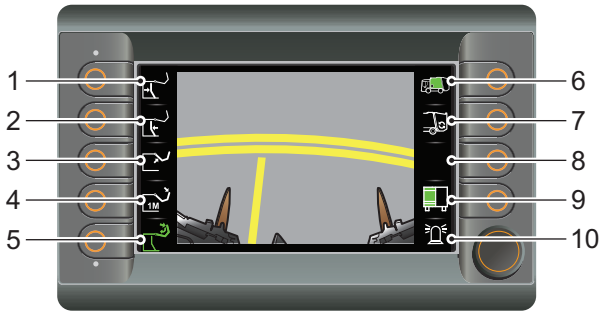
2258-OT1-D-GB-G3

1.  Press switch to select maintenance screens (see '4.8.1 Maintenance' on page 4-20).
2.  Press switch to turn on work lamps (see '4.8.7 Work lamp switch' on page 4-34).
3.  This position is not used in this mode.
4.  This position is not used in this mode.
5.  Calendar and clock display (see '4.7 Calendar and clock' on page 4-18).
6.  Press switch to select body weight information (see '4.8.3 Body weight' on page 4-24).
7.  Press switch to select multi-cycle screens (see '4.8.4 Compaction mechanism multi-cycle adjustment' on page 4-26).
8.  Press switch to select multi-cycle screens and body weight information (see '4.8.4 Compaction mechanism multi-cycle adjustment' on page 4-26).
9.  Press switch to select information screens (see '4.8.2 Information' on page 4-22).
10.  This position is not used in this mode.
1.  Press switch to select variable barrier pressure screens (see '4.8.5 Compaction rate adjustment' on page 4-30).
10.  Press the encoder control to turn on warning beacons (see '4.8.6 Warning beacon switch' on page 4-33).
Turn the encoder control to adjust the brightness of the screen (see '4.5.2 Screen brightness' on page 4-11).

1.  Press switch to select maintenance screens (see '4.8.1 Maintenance' on page 4-20).
2.  Press switch to turn on work lamps (see '4.8.7 Work lamp switch' on page 4-34).
3.  Display of warning pictograms (see '4.6 Warning pictograms' on page 4-15).
4.  Press switch to select green mode for left-hand body (see '4.8.8 Green switch' on page 4-35).
5.  Press switch to select body discharge - cab control panel (see '4.8.12 Discharge controls' on page 4-37).
6.  Press switch to select body weight information (see '4.8.3 Body weight' on page 4-24).
7.  Press switch to select multi-cycle screens (see '4.8.4 Compaction mechanism multi-cycle adjustment' on page 4-26).
8.  Press switch to select multi-cycle screens and body weight information (see '4.8.4 Compaction mechanism multi-cycle adjustment' on page 4-26).
9.  Press switch to select information screens (see '4.8.2 Information' on page 4-22).
10.  Display of warning pictograms (see '4.6 Warning pictograms' on page 4-15).
9.  Press switch to select green mode for right-hand body (see '4.8.8 Green switch' on page 4-35).
10.  Press the encoder control to turn on warning beacons (see '4.8.6 Warning beacon switch' on page 4-33).



4.5.6 Body discharge - Cab control panel



2259-OT1-D-GB-G3

4.5.7 Body discharge - External discharge control panel (option)



2260-OT1-D-GB-G3

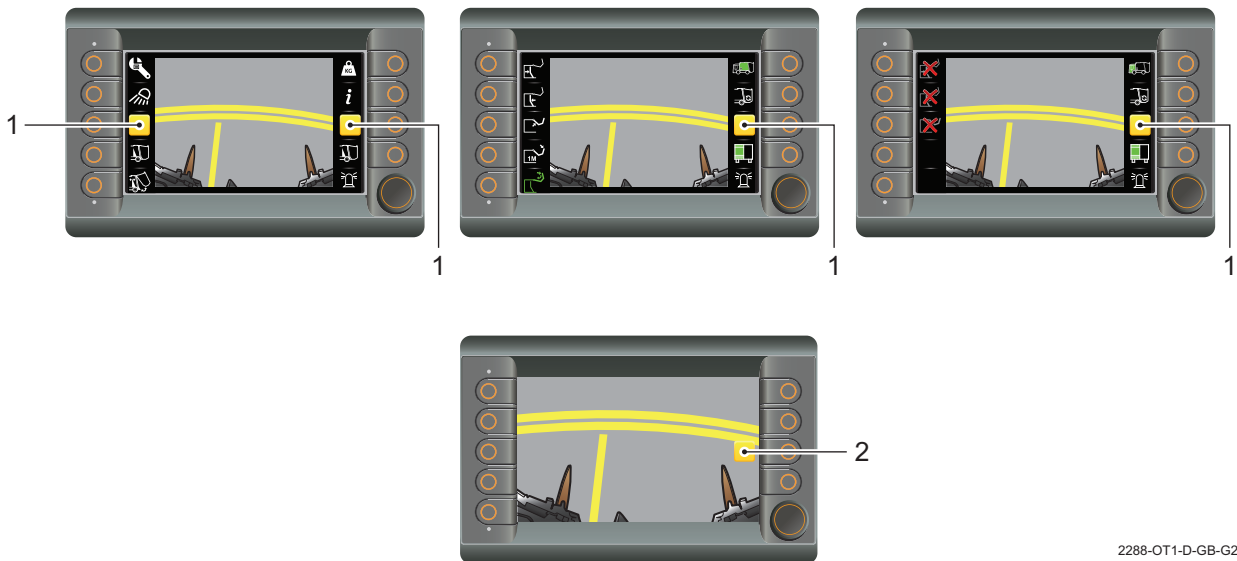
1. Press switch to eject ejection plate. (see '4.8.19 Eject' on page 4-42)
2. Press switch to retract ejection plate (see '4.8.20 Retract' on page 4-43).
3. Press switch to raise tailgate (see '4.8.17 Tailgate raise' on page 4-41).
4. Press switch to lower tailgate to 1 metre (see '4.8.21 Lower tailgate to 1 metre' on page 4-43).
5. Press switch to disable or enable tailgate clear cycle (see '4.8.9 Tailgate clear selection' on page 4-35).
6. Press switch to select body discharge - external discharge control panel (option) (see '4.8.14 External discharge controls' on page 4-39).
7. Press switch to select body system run (see '4.8.13 Body system run controls' on page 4-38).
8. Display of warning pictograms (see '4.6 Warning pictograms' on page 4-15).
9. Display identifies body selected for discharge.
 = Left-hand body.
 = Right-hand body.
10. Press the encoder control to turn on warning beacons (see '4.8.6 Warning beacon switch' on page 4-33).

1. Disabled switches.
2. This position is not used in this mode.
3. Press switch to select body discharge - cab control panel.
4. Press switch to select body system run.
5. Display of warning pictograms (see '4.6 Warning pictograms' on page 4-15).
6. Display identifies body selected for discharge.
 = Left-hand body.
 = Right-hand body.
7. Press the encoder control to turn on warning beacons (see '4.8.6 Warning beacon switch' on page 4-33).



4.6 Warning pictograms

Should an incident occur which requires the driver's immediate attention, an appropriate pictogram will display at a point on the screen (1), dependent on mode selected.



2288-OT1-D-GB-G2

If the screen is showing the view from the rear view camera, the pictogram will display on top of the camera view (2).

Pictogram	Function	Operation	Cause	Action to be taken if pictogram is displayed on the control panel screen
	Tailgate out-of-locks/autobrake function.	The 'Tailgate out-of-locks'/autobrake function has applied the parking brake.	The tailgate is out of its locks while: <ul style="list-style-type: none"> • Tip mode has been selected. • The vehicle speed is below 3 km/h. • The gearbox is in neutral. • The driver has not applied the parking brake. 	Apply the vehicle parking brake. Lower the tailgate into its locks. The 'Tailgate out-of-locks'/autobrake override switch may be operated to release the parking brake in an emergency (see 'Fig. 4-1 Cab control station, Dennis Eagle Elite 6 chassis-cab, right-hand drive' on page 4-4).
	Tailgate out-of-locks/autobrake override switch.	Tailgate out-of-locks'/autobrake override switch has been operated.	The 'Tailgate out-of-locks'/autobrake override switch has been operated to release the parking brake while: <ul style="list-style-type: none"> • The tailgate is out of its locks. • Tip mode has been selected. • The vehicle speed is below 3 km/h. • The gearbox is in neutral. • The driver has not applied the parking brake. 	Apply the vehicle parking brake. Lower the tailgate into its locks. Reset the 'Tailgate out-of-locks'/autobrake override switch.
	Rear view camera failed.	The screen will not show the view from the rear view camera.	The control system is not receiving a signal from the rear view camera.	Switch system off and restart. If warning recurs, refer the incident/machine to supervision for attention.
	Green switch failed.	The green switch function will not work.	The green switch function has timed out or failed.	Switch system off and restart. If warning recurs, refer the incident/machine to supervision for attention.



4

Pictogram	Function	Operation	Cause	Action to be taken if pictogram is displayed on the control panel screen
	Tailgate signal button operated.	Tailgate signal buzzer will sound.	The tailgate signal button on a compaction mechanism control panel has been operated.	This function is used as a means of communication between the loading crew and driver.
	Emergency stop operated.	The 'Emergency stop' operated buzzer will sound. All refuse collection operations except 'Rescue' are inhibited.	An 'Emergency stop' push-button has been operated.	Establish reason for 'Emergency stop' push-button being operated.
	Rescue function.	None.	The rescue function is being operated.	Reset the 'Emergency stop'.
	Control systems communication error.		The system electronic control unit has detected a fault in the control system.	Restart the refuse collection mechanism.
	Control systems communication error.		The control system has detected a fault between the electronic control unit and the screen.	Do not attempt to drive vehicle.
	Hydraulic oil hot (Temperature > 85°C).	The refuse collection mechanism may not operate to specification.	The hydraulic oil temperature is too hot for normal operation of the refuse collection mechanism.	Switch system off and restart. If warning recurs, refer the incident/machine to supervision for attention.
	Hydraulic oil filter blocked.	The refuse collection mechanism may not operate to specification.	The hydraulic oil filter is blocked.	Switch system off and restart. If warning recurs, refer the incident/machine to supervision for attention.
	Hydraulic system overpressure.	All refuse collection operations are inhibited.	An hydraulic stall out has caused the oil pressure to exceed a preset pressure.	Refer the incident/machine to supervision for attention.
	Tailgate out-of-locks.	Tailgate out-of-locks buzzer will sound if gear is engaged. Operation of the compaction mechanism is inhibited.	The tailgate is out of its locks.	None, Advisory only.
	Flashing pictogram. Tailgate position sensor fault.	None.	The Tailgate position sensor is faulty.	Refer the incident/machine to supervision for attention.
	Tailgate raised.	Tailgate out-of-locks buzzer will sound if gear is engaged.	The tailgate is fully raised.	Be aware of the height of the raised tailgate. Make sure raised tailgate will not impact on surrounding structures, overhanging cables, etc.
	Body access door open.	All refuse collection operations are inhibited.	Body access door is open.	Establish reason for body access door being open. Check that there are no personnel inside the refuse collection body. Close the body access door. Restart the refuse collection mechanism.

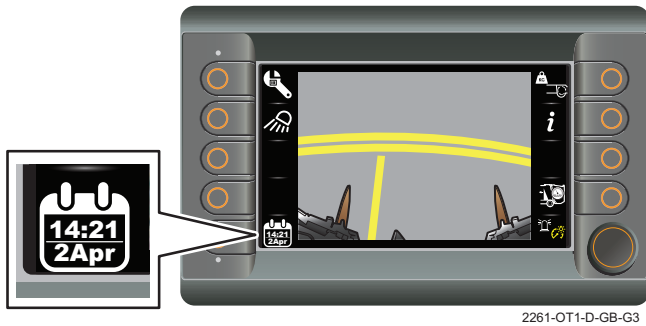


OPERATOR'S CONTROLS

Pictogram	Function	Operation	Cause	Action to be taken if pictogram is displayed on the control panel screen
	Waste container lifting device low.	Waste container lifting device down buzzer will sound.	The waste container lifting device has not been raised to the required height for travelling.	Refer to Waste container lifting device Operator's Handbook. Raise waste container lifting device until warning is cleared.
	Footboard occupied.	Refer to Footboard Operator's Handbook.		
	Footboard test switch operated.	Refer to Footboard Operator's Handbook.		
	Footboard interlock override switch operated.	Refer to Footboard Operator's Handbook.		
	Footboard interlock override switch delay timer.	Refer to Footboard Operator's Handbook.		
	Container overweight for weighing system.	All refuse collection operations are inhibited.	The weight of a container being lifted by a waste container lifting device system incorporating a load weighing device, exceeds weight limit.	Remove container. Restart the refuse collection mechanism.
	Maximum body weight sensed by body weighing system.	All refuse collection operations are inhibited.	The body weighing system has detected that the body weight has reached the maximum set for the vehicle.	Proceed to tip and discharge body. If weighing system fitted with override function, this may be operated (refer to body weighing system operating instructions).
	Body weighing system switched off.	Body system functions operate as normal.	The body weighing system has been switched off.	None, Advisory only.
	Hydraulic oil level low.	None	The level of hydraulic oil in the refuse collection mechanism oil tank is low.	Check and replenish hydraulic oil (see 'Service Manual').
	Hydraulic oil over temperature cut out (Temperature > 90°C).	All refuse collection operations are inhibited.	The hydraulic oil temperature is too hot for normal operation of the refuse collection mechanism.	(See '5.8 System warnings' on page 5-28). Refer the incident/machine to supervision for attention.
	Battery voltage low.	The refuse collection mechanism may not operate to specification.	The vehicle's battery voltage is too low for normal operation of the refuse collection mechanism.	Refer the incident/machine to supervision for attention.
	System fault.	The refuse collection mechanism may not operate to specification.	One of the control system electrical solenoid valves has failed.	Refer the incident/machine to supervision for attention.



4.7 Calendar and clock



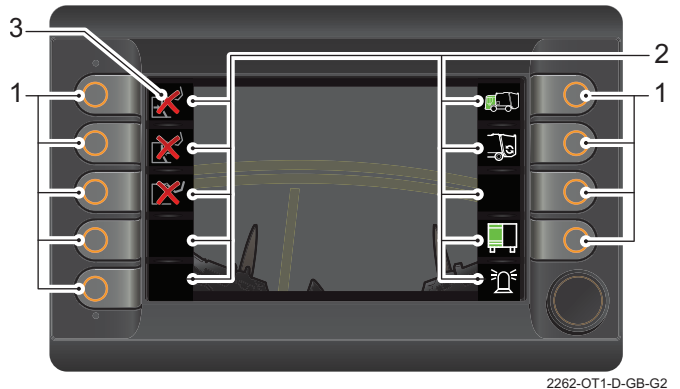
The top line shows the clock.

The bottom line shows the calendar.

4.7.1 Adjusting the calendar and clock

To adjust the clock see Olympus Twin Pack Service Manual.

4.8 Switches



The function of the control switches (1) changes according to the screen mode selected.

A pictogram (2) beside each switch indicates the function of that switch. If no pictogram is shown, the switch does not have a function in the mode selected or the screen area is used to display information or warning pictograms (see '4.6 Warning pictograms' on page 4-15).

Some switch functions are available on more than one operating mode.

A red cross (3) superimposed over a switch pictogram indicates that the function of the switch is disabled in the operating mode selected. For example, when the optional external tip controls are selected, the raise tailgate, eject and retract switches are disabled.



Go to maintenance screens
(see '4.8.1 Maintenance' on page 4-20).



Go to body weight information screens
(see '4.8.3 Body weight' on page 4-24).



Go to multi-cycle screens
(see '4.8.4 Compaction mechanism multi-cycle adjustment' on page 4-26).



Go to multi-cycle screens and body weight information
(see '4.8.4 Compaction mechanism multi-cycle adjustment' on page 4-26).



Go to information screens
(see '4.8.2 Information' on page 4-22).



Work lamps
(see '4.8.7 Work lamp switch' on page 4-34).



Go to compaction rate adjustment screens
(see '4.8.5 Compaction rate adjustment' on page 4-30).



Warning beacons (see '4.8.6 Warning beacon switch' on page 4-33).

Adjust screen display brightness
(see '4.5.2 Screen brightness' on page 4-11).



Warning beacons (see '4.8.6 Warning beacon switch' on page 4-33).



Enable Green mode
(see '4.8.8 Green switch' on page 4-35).



Go to body discharge controls
(see '4.8.12 Discharge controls' on page 4-37).



Disable/Enable tailgate clear operation
(see '4.8.9 Tailgate clear selection' on page 4-35).



Go to external body discharge controls
(see '4.8.14 External discharge controls' on page 4-39).



Go to cab control panel body discharge controls
(see '4.8.15 In-Cab discharge controls' on page 4-39).



Go to body system run controls
(see '4.8.13 Body system run controls' on page 4-38).



Eject
(see '4.8.19 Eject' on page 4-42).



Retract
(see '4.8.20 Retract' on page 4-43).



Raise tailgate
(see '4.8.17 Tailgate raise' on page 4-41).



Lower tailgate to 1 metre
(see '4.8.21 Lower tailgate to 1 metre' on page 4-43).



4.8.1 Maintenance

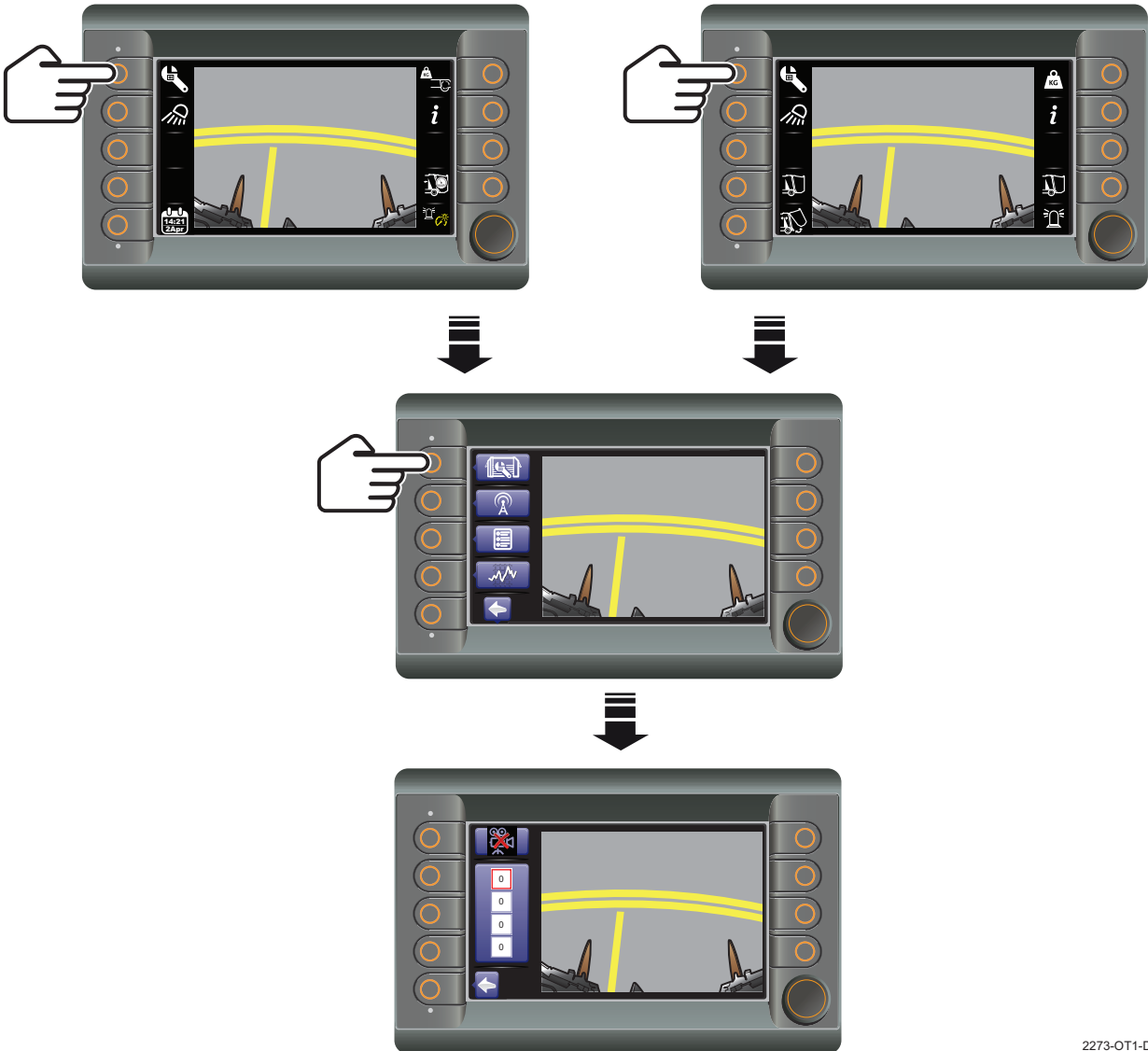


Press and release the switch to display the maintenance screen menu.



Caution:
Do not access these screens unless you are an accredited Olympus Twin Pack Service Technician.

Maintenance screens allow approved service technicians to perform specified operations on the control system and are password protected.



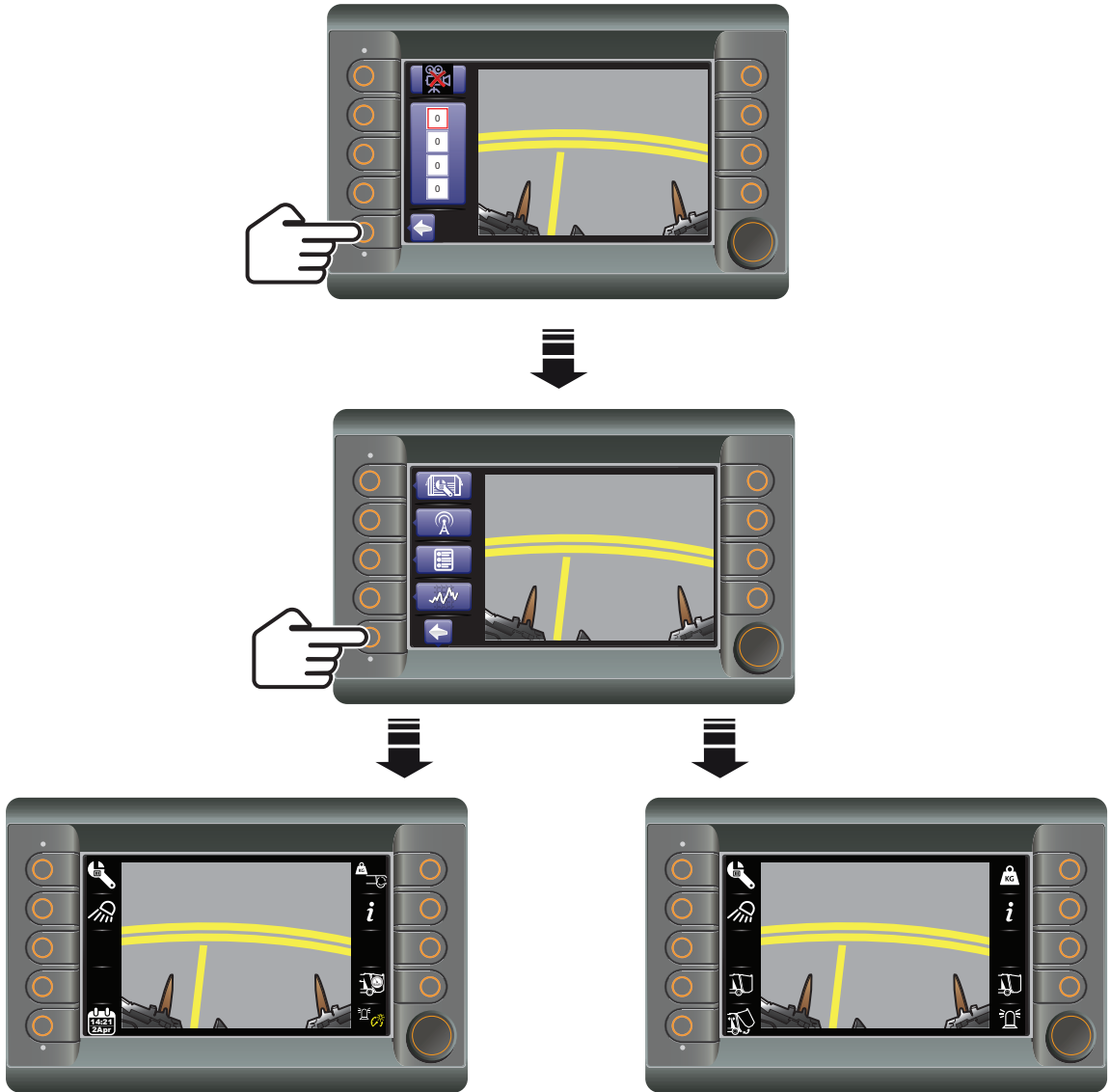
2273-OT1-D-GB-G3



To leave the Maintenance screen menu:



Press and release the return switch to return to the 'Body system off' or 'Body system run' screen display, dependant on position of 'Body main' switch, from the maintenance screen.

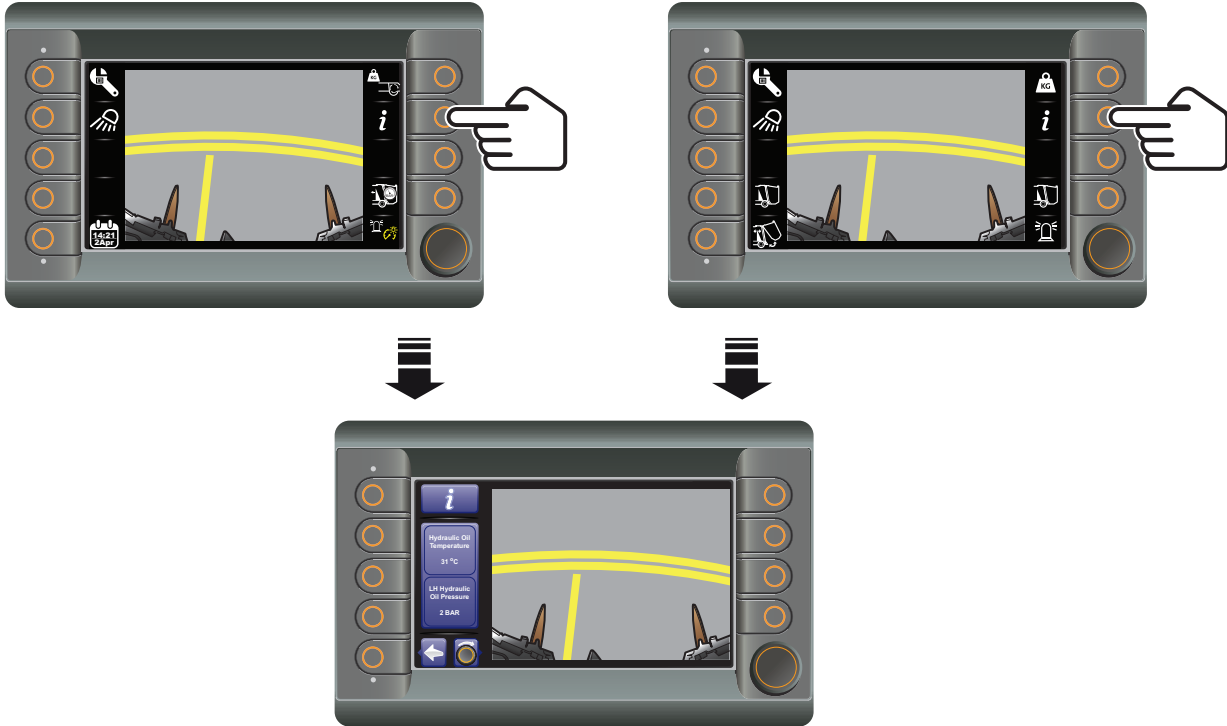


2274-OT1-D-GB-G3



4.8.2 Information

i Press and release the switch to display the information screens.



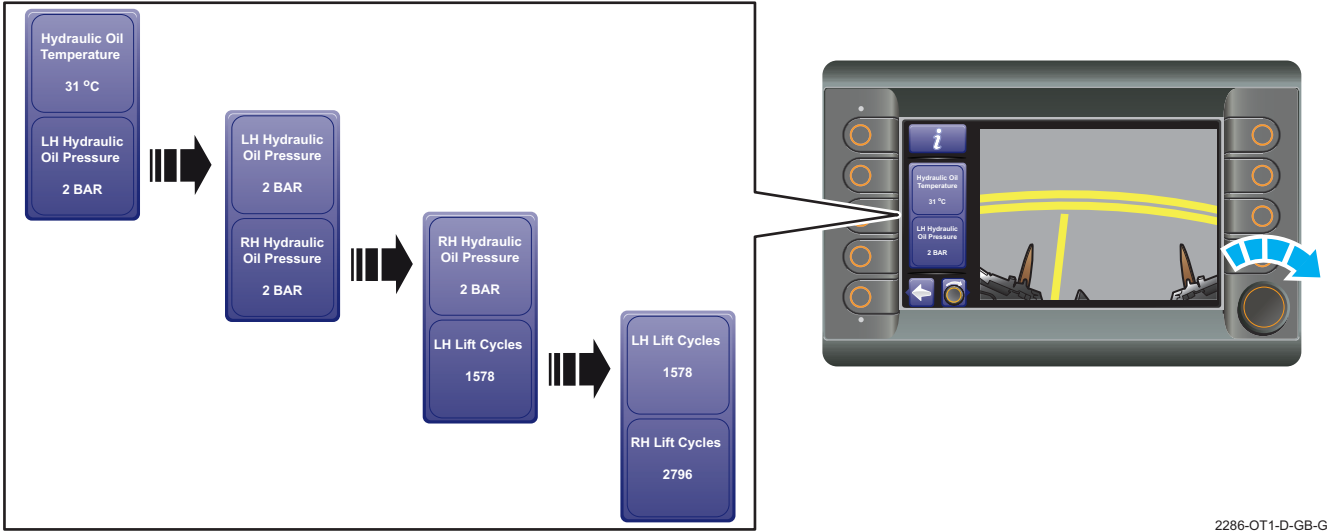
2424-OT1-D-GB-G3

The screen displays two panels which display the following system operating information, 'Two at a time'.

Message	Explanation
Hydraulic Oil Temperature	Hydraulic system oil temperature.
LH Hydraulic Oil Pressure	Left-hand body hydraulic system oil pressure.
RH Hydraulic Oil Pressure	Right-hand body hydraulic system oil pressure.
LH Lift Cycles **	Number of full operating cycles completed by left-hand waste container lifting device.
RH Lift Cycles **	Number of full operating cycles completed by right-hand waste container lifting device.
LH Body Cycles	Number of full operating cycles completed by left-hand body.
RH Body Cycles	Number of full operating cycles completed by right-hand body.
PDM Software Version/Issue	The version and issue of the software loaded onto the control unit fitted in the control panel.
PLC1 Software Version/Issue	The version and issue of the software loaded onto PLC1.
PLC2 Software Version/Issue	The version and issue of the software loaded onto PLC2.
PLC3 Software Version/Issue	The version and issue of the software loaded onto PLC3.
PLC4 Software Version/Issue	The version and issue of the software loaded onto PLC4.
Lift Software Version/Issue **	The version and issue of the software loaded onto control unit fitted in the waste container lifting device.
Cab Software Version/Issue	The version and issue of the software loaded onto control unit fitted in the cab.
** This information is only displayed when waste container lifting devices are fitted to the body.	



Turning the encoder control scrolls the information displayed in the panels.

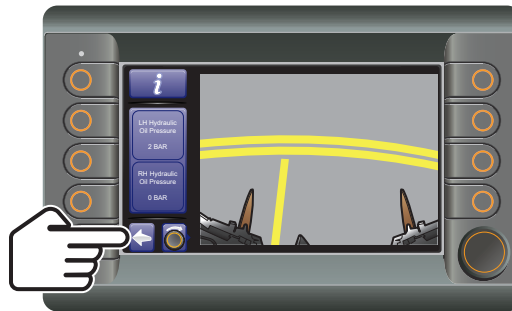


2286-OT1-D-GB-G2

To leave the Information screen:



Press and release the return switch to return to the 'Body system off' or 'Body system run' screen display, dependant on position of 'Body main' switch, from the information screen.



2291-OT1-D-GB-G3



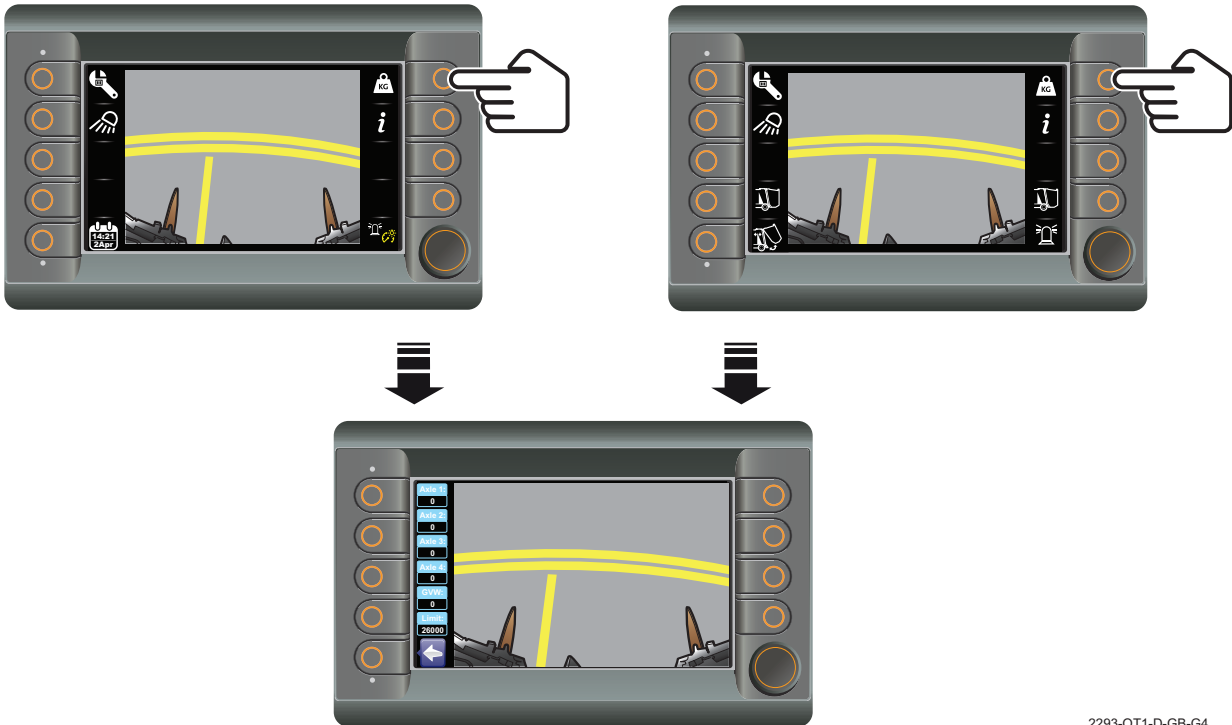
4.8.3 Body weight

Body weight only



Press and release the switch to display the body weight screen.

4



2293-OT1-D-GB-G4

When the vehicle is fitted with a body weighing system, the screen will display the following system operating information:

Message	Explanation
Axle 1: Axle 2: Axle 3: Axle 4:	The measured load in kg on the specified axle. If the vehicle is not fitted with a specified axle, e.g. 'Axle 4:' not fitted on 6x2 variants, the value will be 0.
GVW:	The total measured gross vehicle weight axle load in kg.
Limit.	The maximum legal gross vehicle weight axle load in kg.

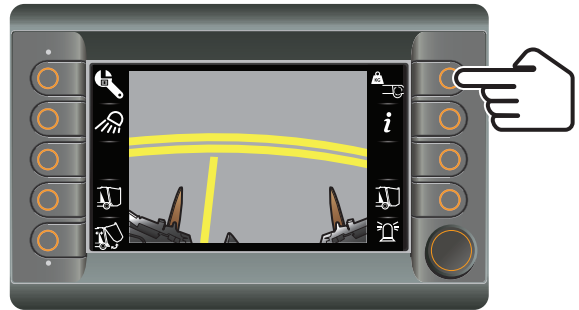
Note: if the measured total gross vehicle weight axle load exceeds the maximum legal gross vehicle weight axle load, the body weighing warning pictogram will display (see '4.6 Warning pictograms' on page 4-15).



Body weight and multi-cycle



Press and release the switch to display the body weight and multi-cycle screen.

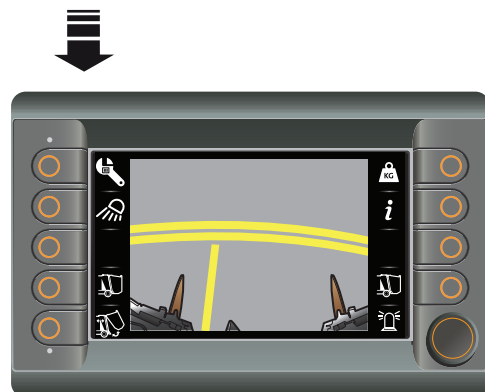
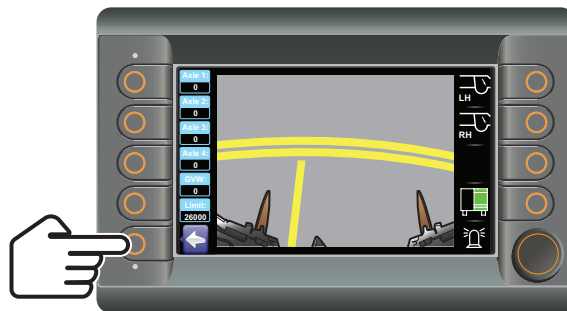


2293-OT1-D-GB-G3

To leave the body weight screen:



Press and release the return switch to return to the 'Body system off' or 'Body system run' screen display, dependant on position of 'Body main' switch.



2348-OT1-D-GB-G3



4.8.4 Compaction mechanism multi-cycle adjustment



Press and release the switch to access the compaction mechanism multi-cycle screen.

4

The compaction mechanism multi-cycle screen allows adjustment of the number of compaction cycles which the compaction mechanism completes when the multi-cycle mode is switched on.



3853-OT1-D-GB-G2

When the screen is selected, the body weight screen is shown on the left of the screen, regardless of whether or not the body weighing function is operational.

- If the body weighing function is operational the left-hand side of the screen will show body weights as described in (see '4.8.3 Body weight' on page 4-24).
- If the body weighing function is not operational the left-hand side of the screen will show 0 for all the values.

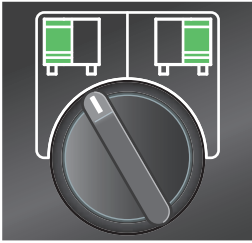
Adjustment is made for each compaction mechanism separately.

Adjustment can be made from 2 to 6 cycles.



To change the number of compaction cycles for the left-hand body:

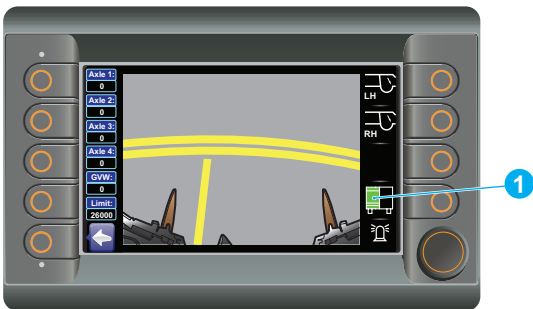
1. Turn the body discharge selector switch to select the left-hand body.



2243-OT1-D-GB-G2

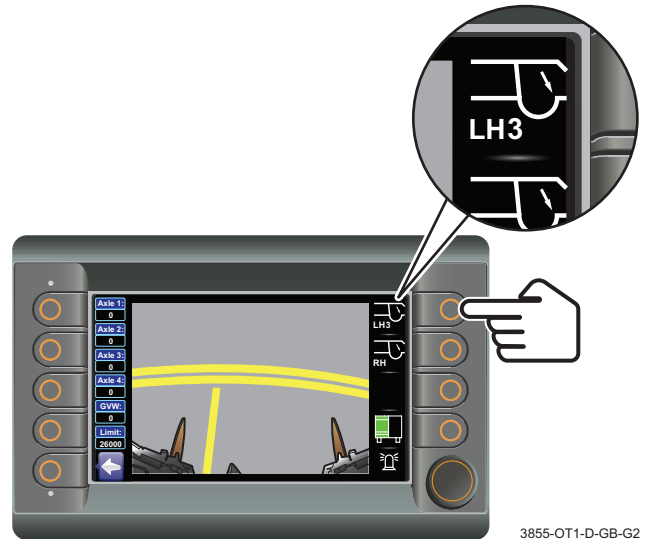
2. Press and release the multi-cycle switch. The screen should change to show the multi-cycle screen with:

- The left-hand body pictogram (1).



3854-OT1-D-GB-G2

3. Press and release the switch beside the left-hand body until the required number of cycles is shown by the number next to LH.
- 2, 3, 4, 5, or 6 cycles can be selected.

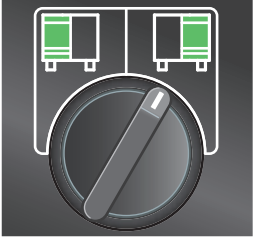


3855-OT1-D-GB-G2



To change the number of compaction cycles for the right-hand body:

1. Turn the body discharge selector switch to select the right-hand body.



2244-OT1-D-GB-G2

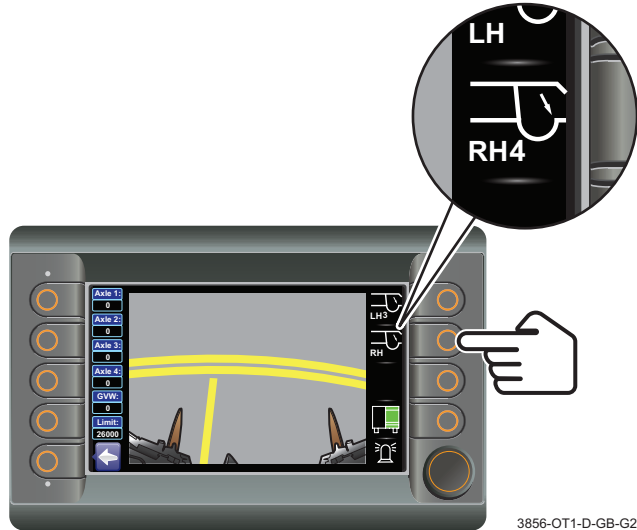
2. Press and release the multi-cycle switch. The screen should change to show the multi-cycle screen with:

- The right-hand body pictogram (1).



3857-OT1-D-GB-G2

3. Press and release the switch beside the right-hand body until the required number of cycles is shown by the number next to RH.
 - 2, 3, 4, 5, or 6 cycles can be selected.



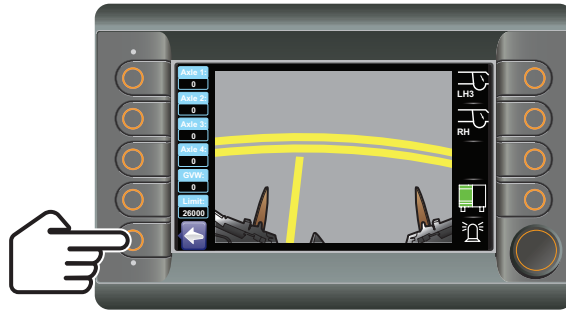
3856-OT1-D-GB-G2



To leave the Compaction mechanism multi-cycle adjustment screen:



Press and release the return switch to return to the 'Off' or 'On' screen display.



3858-OT1-D-GB-G2

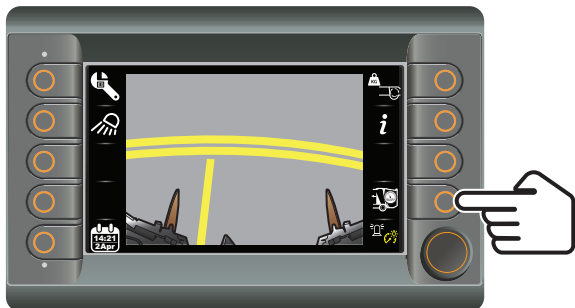


OPERATOR'S CONTROLS

4.8.5 Compaction rate adjustment



Press and release the switch to access the compaction rate adjustment screen.



3859-OT1-D-GB-G2

Waste type



Cardboard



Garden



Glass



Mixed recyclable



Household



Paper



Plastic

The compaction rate adjustment screen allows the compaction rate to be adjusted to maximise the load compaction for different types of waste.

Adjustment is made for each body separately.

Adjustment can be made for type of waste or hydraulic pressure.

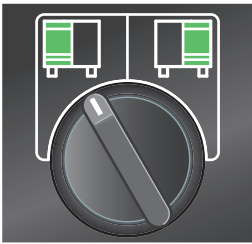
- 7 different compaction rates can be selected.
- The compaction pressure can be adjusted between 10 and 40 Bar.



OPERATOR'S CONTROLS

To adjust the compaction rate for the left-hand body:

1. Turn the Body discharge selector switch to select the left-hand body.



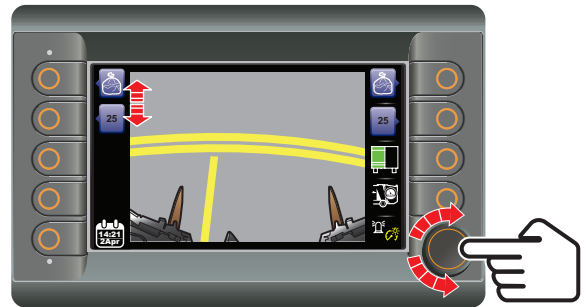
2243-OT1-D-GB-G2

2. Press and release the compaction rate switch. The screen should change to show compaction rate adjustment screen with:
 - The left-hand body pictogram (1).
 - Either the left-hand waste type pictogram (2) or left-hand pressure value (3) highlighted.



3861-OT1-D-GB-G3

3. Turn the encoder control to select which value you want to adjust, waste type or pressure value, and then press the encoder control.



3862-OT1-D-GB-G2

4. Turn the encoder control until the required waste type pictogram or pressure value is shown, and then press the encoder control to confirm the selection.

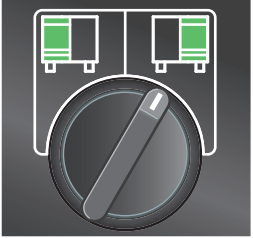


3863-OT1-D-GB-G2



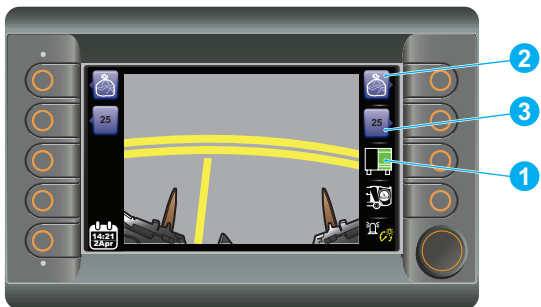
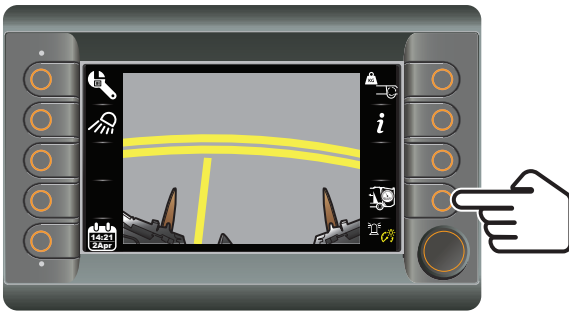
To adjust the compaction rate for the right-hand body:

1. Turn the Body discharge selector switch to select the right-hand body.



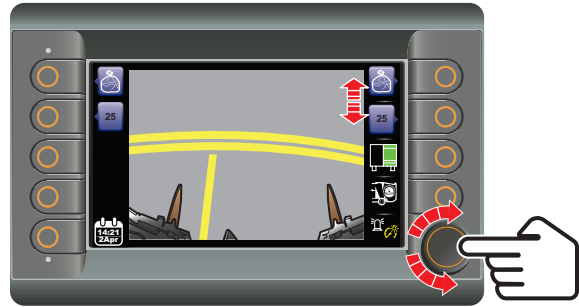
2244-OT1-D-GB-G2

2. Press and release the compaction rate switch. The screen should change to show compaction rate adjustment screen with:
 - The right-hand body pictogram (1).
 - Either the right-hand waste type pictogram (2) or right-hand pressure value (3) highlighted.



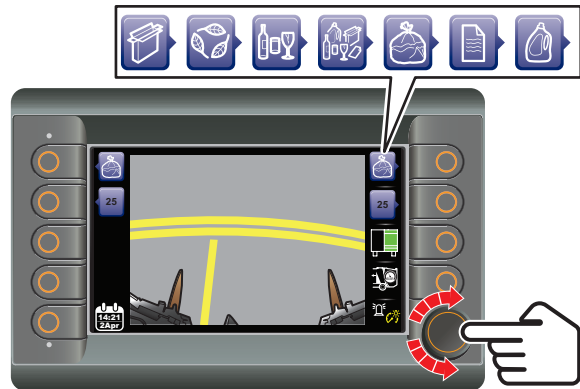
3864-OT1-D-GB-G2

3. Turn the encoder control to select which value you want to adjust, waste type or pressure value, and then press the encoder control.



3865-OT1-D-GB-G2

4. Turn the encoder control until the required waste type pictogram or pressure value is shown, and then press the encoder control to confirm the selection.



3866-OT1-D-GB-G2



To leave the Compaction rate adjustment screen:



Press and release the return switch to return to the 'Off' screen display.



3867-OT1-D-GB-G2

4.8.6 Warning beacon switch



Press and release the encoder control to turn the warning beacons on and off.

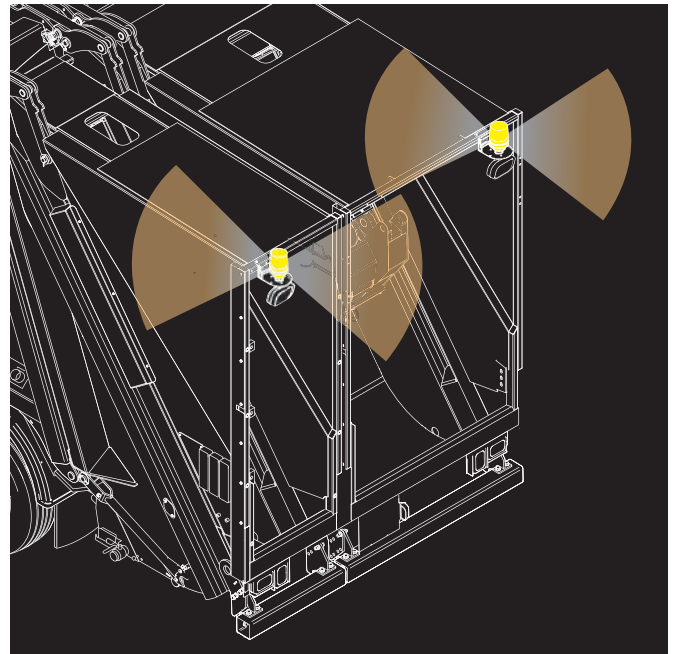


The pictogram will illuminate green when the warning beacons are switched on.

The warning beacons will automatically switch off if the vehicle speed exceeds 15 mph (25 km/h).

The warning beacons may also be controlled by a separate switch in the cab header or fascia switch panel (see '4.2.2 Warning beacon switch (if fitted)' on page 4-6).

If a separate warning beacon switch is fitted, it overrides the cab control panel switch function.



2383-OT1-D-GB-G2



4.8.7 Work lamp switch

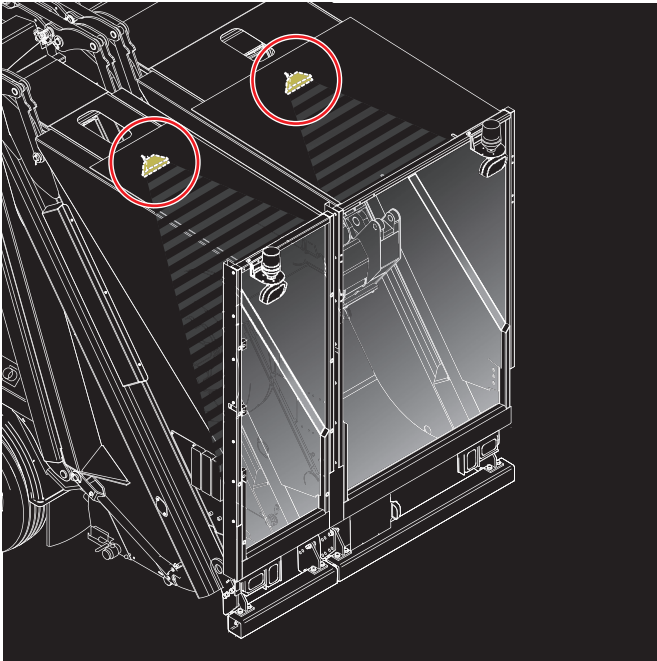


Press and release the switch to turn the tailgate loading lamps and all work lamps on and off.

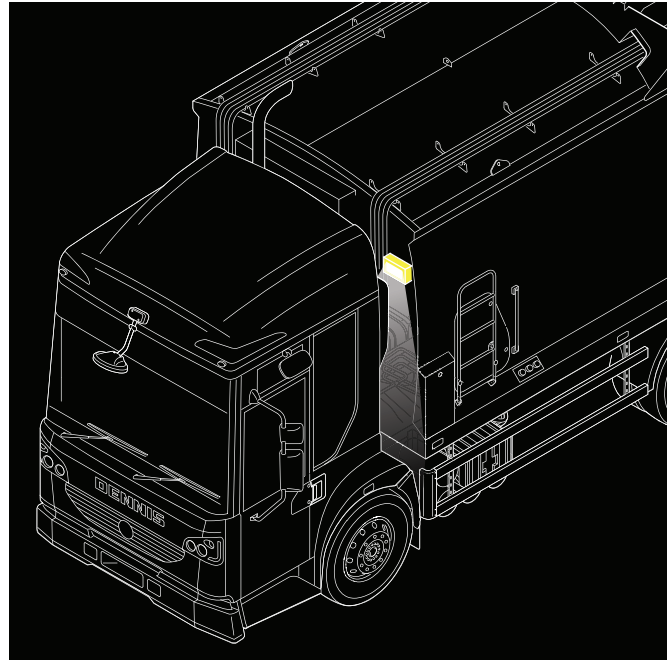


The pictogram will illuminate green when the lights are on.

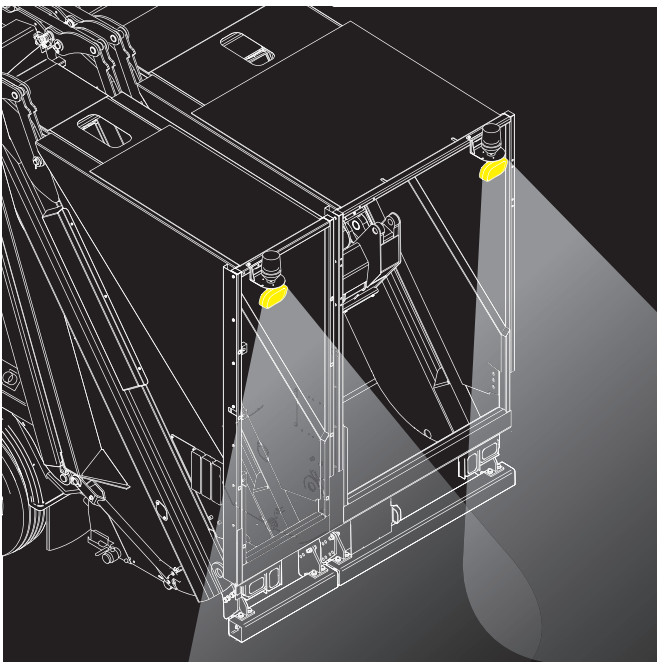
4



2251-OT1-D-GB-G2



2253-OT1-D-GB-G3



2384-OT1-D-GB-G2



4.8.8 Green switch



Press and release the switch to turn the green mode on and off.

- The left-hand switch (1) controls the left-hand body.
- The right-hand switch (2) controls the right-hand body.

The pictogram will illuminate green when the green mode is switched on.

The green mode automatically switches out when the body run switch is turned to off.



2349-OT1-D-GB-G3

This switch enables the operator to select the ejector plate setback according to the density of the waste being loaded.

Off position

The ejector plate moves back into the body at a rate designed to compact normal household refuse.

On position

Dependant on customer option fitted, the ejector plate will operate in one of two ways.

Standard green waste collection

The ejector plate automatically retracts to the front of the refuse collection body.

The switch pictogram will flash while the ejector plate is retracting and turn green when the ejector plate reaches the front of the body.

If the green switch is pressed while the ejector plate is retracting:

- The ejector plate will stop retracting in the position it has reached.
- The switch pictogram will turn white.
- Operation will revert to normal refuse collection.

If the ejector plate does not reach the front of the body within a prescribed time, the green switch inoperative warning pictogram will display on the screen.

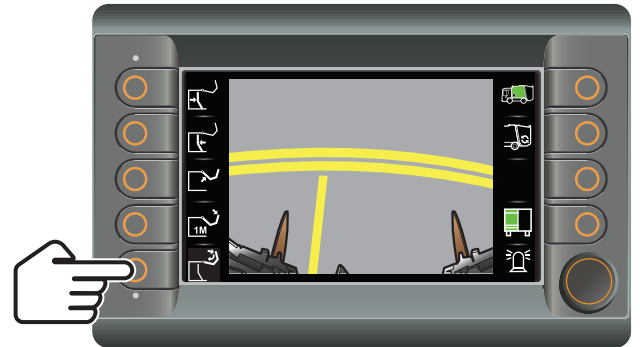
Special collection

The ejector plate moves back into the body at a faster rate to accommodate denser refuse which cannot be easily compacted.

4.8.9 Tailgate clear selection



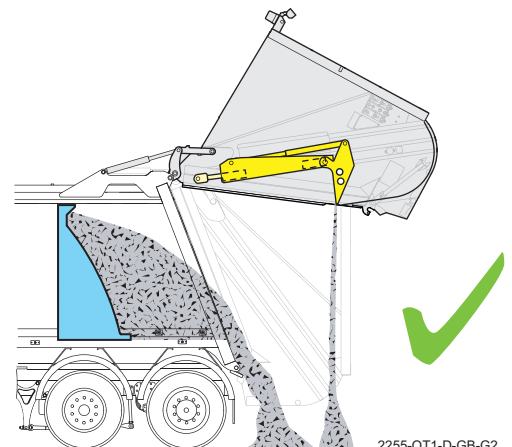
Press and release switch to disable the tailgate clear function. The pictogram will illuminate white.



2351-OT1-D-GB-G3

When the tailgate clear function is enabled:

- The pictogram will illuminate green.
- The compaction mechanism will complete one complete cycle immediately the tailgate reaches full height to clear any accumulation of refuse from the tailgate hopper.



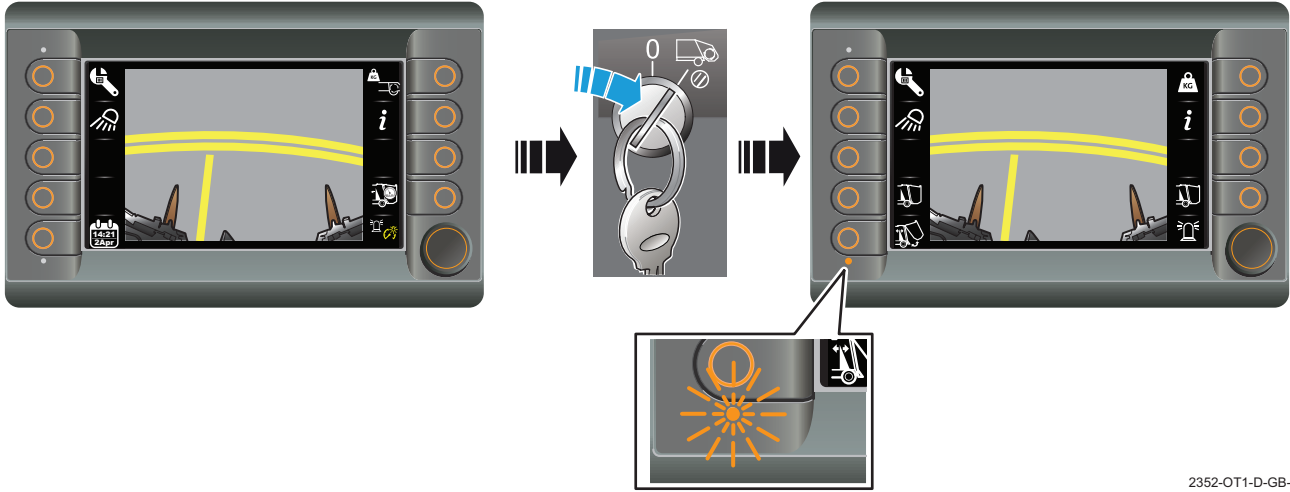
2255-OT1-D-GB-G2



4.8.10 System run

Insert key into 'Body main' switch and turn key clockwise to run position to enable compaction mechanism controls.

4



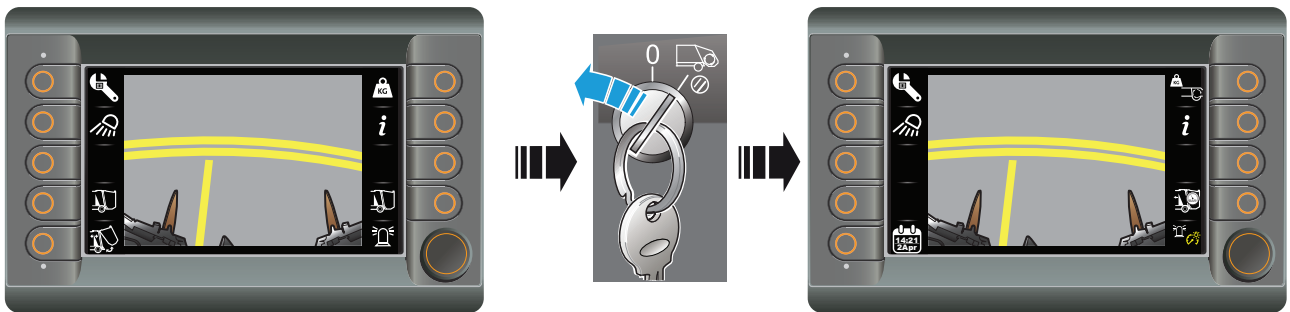
2352-OT1-D-GB-G3

If the LED below the bottom left-hand switch flashes orange, the control panel has not initialised.

- Turn the 'Body main' switch off and on again.

4.8.11 System off

Turn key counter-clockwise to disable compaction mechanism controls.



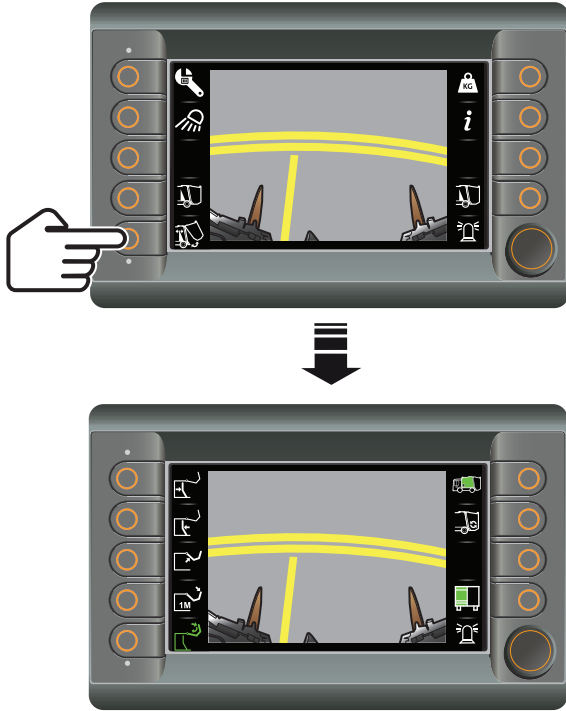
2353-OT1-D-GB-G3



4.8.12 Discharge controls



Press and release switch to enable in-cab discharge controls and disable compaction mechanism controls.



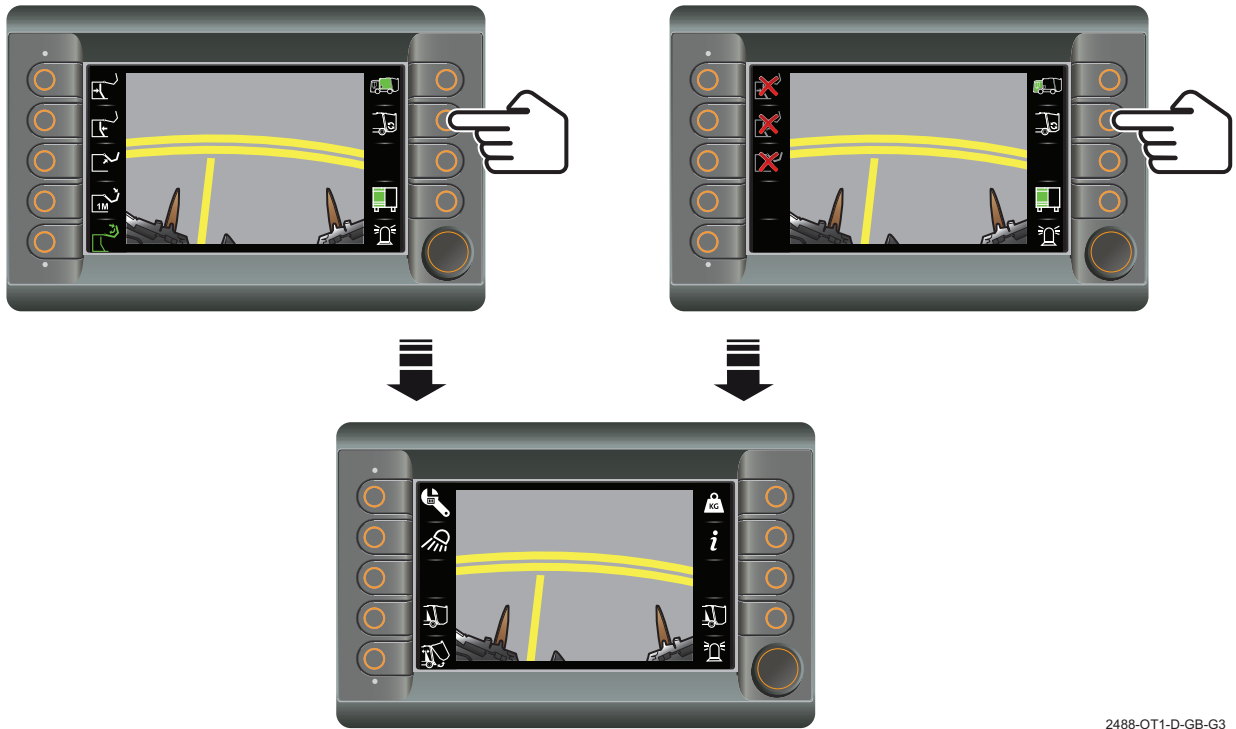
2489-OT1-D-GB-G4



4.8.13 Body system run controls



Press and release switch to enable compaction mechanism controls and disable in-cab discharge controls or external discharge controls, if fitted.



2488-OT1-D-GB-G3

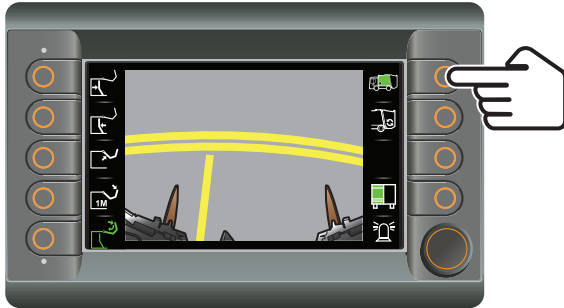


OPERATOR'S CONTROLS

4.8.14 External discharge controls



Press and release switch to enable external body discharge controls and disable in-cab discharge controls.



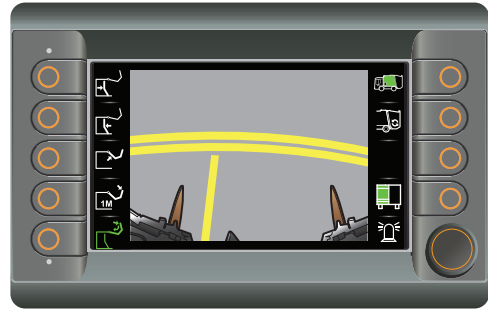
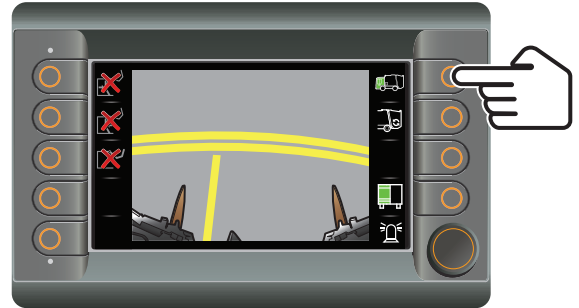
2357-OT1-D-GB-G3

This switch is functional only when optional external discharge control panel is fitted.

4.8.15 In-Cab discharge controls



Press and release switch to enable in-cab discharge controls and disable external body discharge controls.



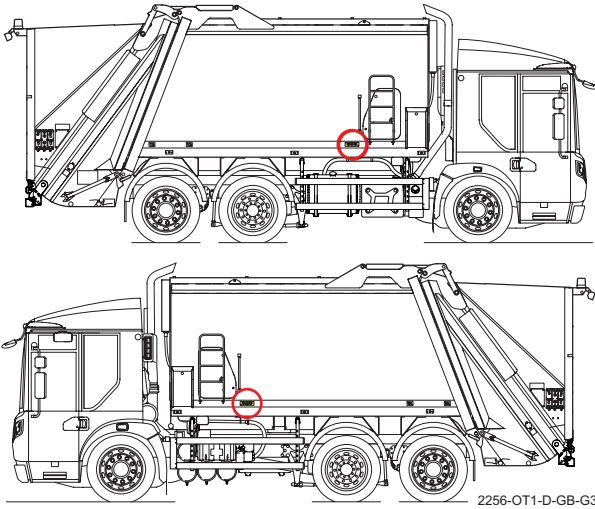
2358-OT1-D-GB-G3

This switch is functional only when optional external discharge control panel is fitted.



4.8.16 External discharge control panel (option)

4

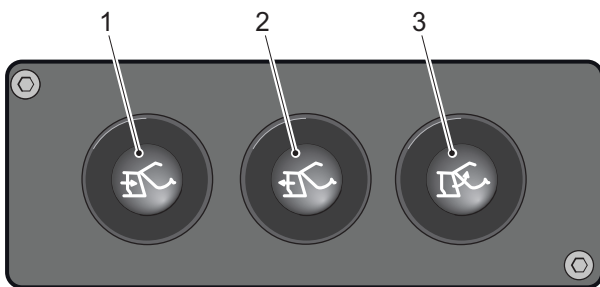


An external discharge control panel when fitted, is located on the outer side of the corresponding body at the front of the body.

- The left-hand control panel controls the left-hand body.
- The right-hand control panel controls the right-hand body.

Each control panel contains the following controls:

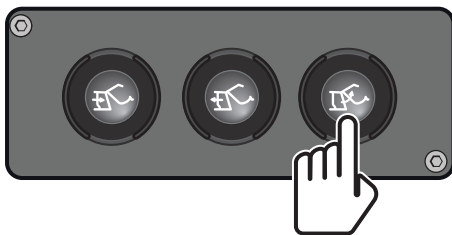
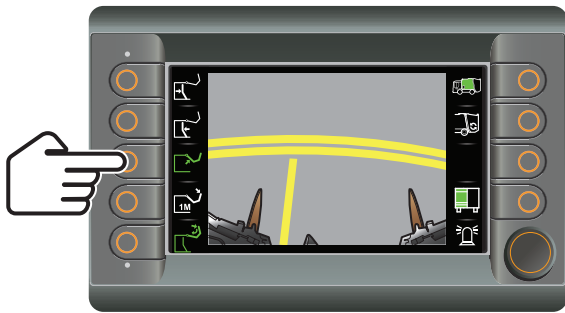
1. Ejector plate eject push-button, (see '4.8.19 Eject' on page 4-42).
2. Ejector plate retract push-button, (see '4.8.20 Retract' on page 4-43).
3. Tailgate raise push-button, (see '4.8.17 Tailgate raise' on page 4-41).



OL10HGB01-110



4.8.17 Tailgate raise



2359-OT1-D-GB-G3

To raise a tailgate, press and hold:

- Switch on the cab control panel.
- The tailgate raise push-button on the external discharge control panel (when energised).

As the tailgate raises, the 'Vehicle reversing' audible warning device will sound and the 'Tailgate out-of-locks' pictogram (A) will display on the control panel screen. When the tailgate is fully raised, the 'Tailgate raised' pictogram (B) will display on the control panel screen.

If the button is released at any point while the tailgate is raising:

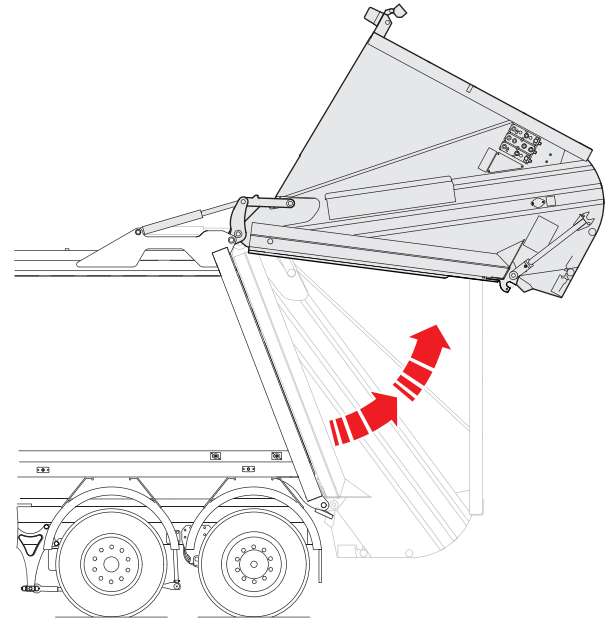
- The tailgate will stop in the position it is in until the button is operated again to raise the tailgate.
- The 'Tailgate out-of-locks' pictogram (A) will display on the control panel screen.

If a gear is selected while a tailgate is out the locks, the 'Tailgate out-of-locks' warning buzzer will sound.

Vehicles fitted with 'Tailgate out-of-locks/autobrake function'

If the tailgate is raised while the parking brake is released, neutral is selected and vehicle speed less than 3 km/h, the parking brake will apply automatically immediately the tailgate is out of its locks.

At the same time the 'Tailgate out-of-locks/autobrake function' pictogram (C) will display on the screen.

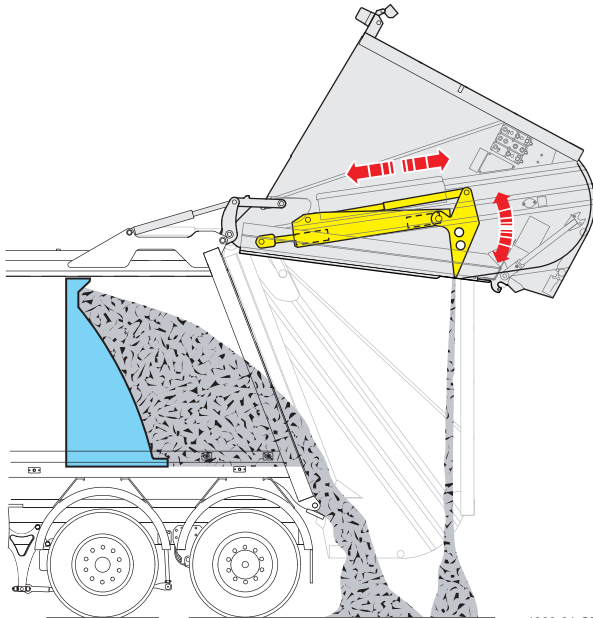


2263-OT1-D-GB-G2

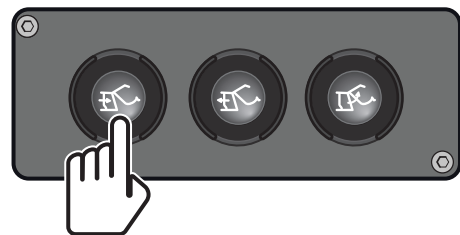
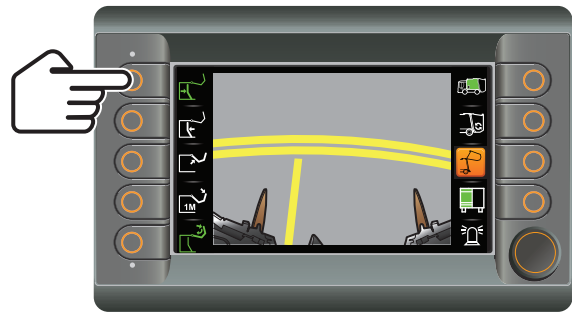


4.8.18 Tailgate clear cycle

When the tailgate clear cycle has been enabled, the compaction mechanism will perform one cycle immediately the tailgate reaches full height to clear refuse from the tailgate.



4.8.19 Eject

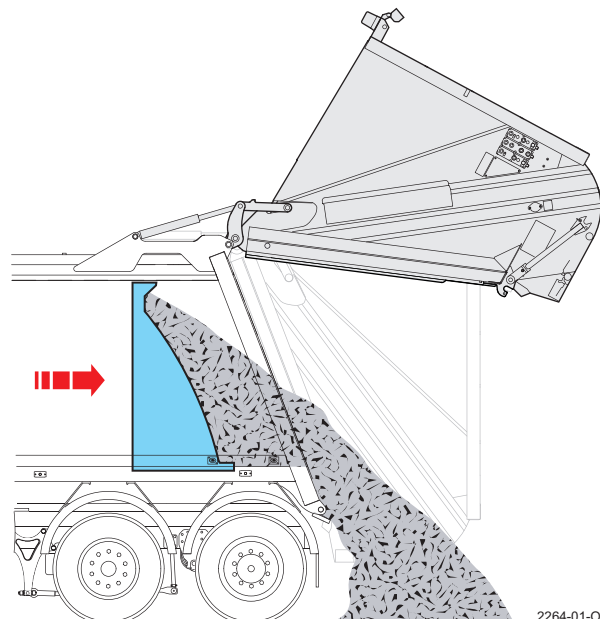


2487-OT1-D-GB-G3

To eject the waste at the discharge site, press and hold:

- Switch on the cab control panel.
- The 'Ejector plate eject' push-button on the external discharge control panel (when energised).

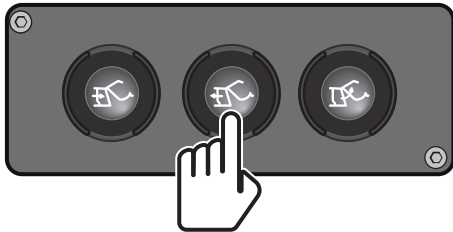
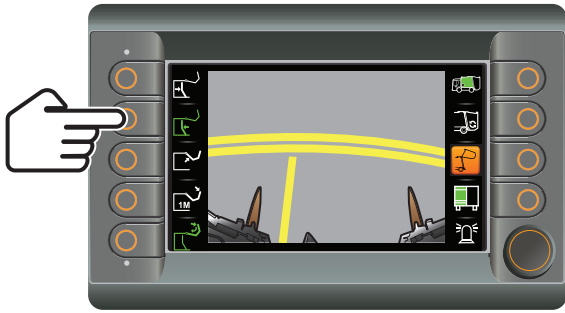
If the button is released at any point during the ejection process, the plate will stop in the position it is in until either the button is operated again or the retract button is pressed to retract the ejector plate.



2264-01-OT1-GB-G2



4.8.20 Retract

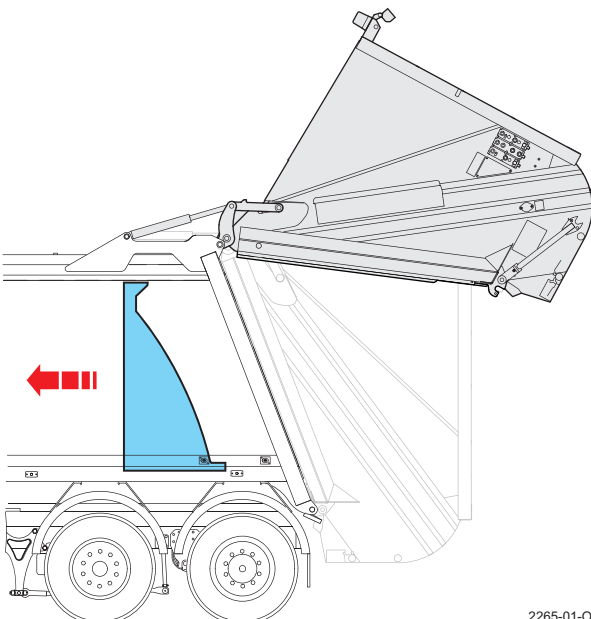


2486-OT1-D-GB-G3

To retract the ejector plate, press and hold:

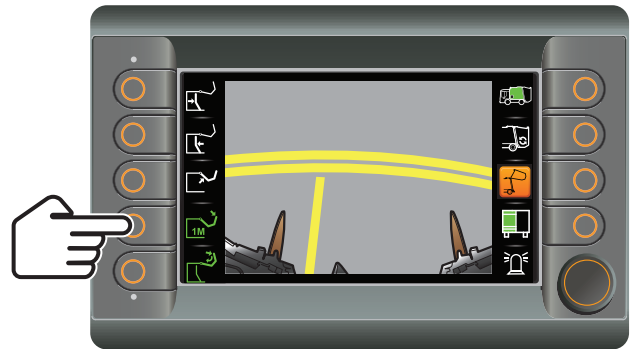
- Switch on the cab control panel.
- The 'Ejector plate retract' push-button on the external discharge control panel (when energised) .

If the button is released at any point during the retraction process, the ejector plate will stop in the position it is in until either the button is operated again or the eject button is pressed to eject the ejector plate.



2265-01-OT1-GB-G2

4.8.21 Lower tailgate to 1 metre



2485-OT1-D-GB-G3

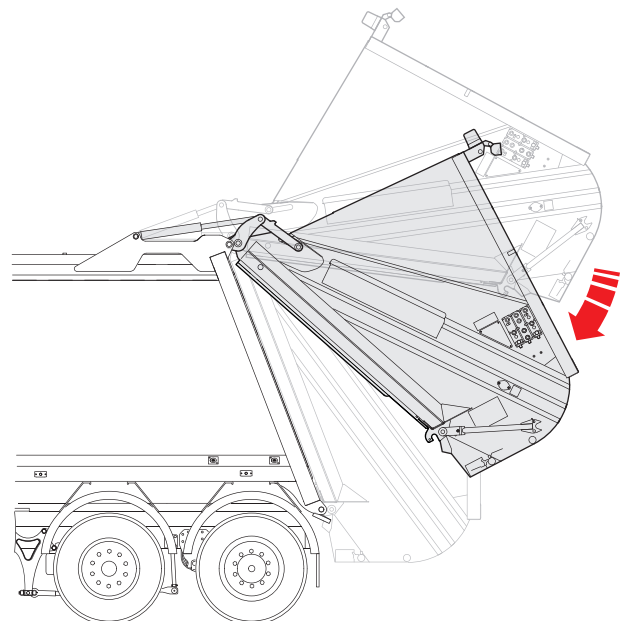
To lower the tailgate to 1 metre, press and hold switch on the cab control panel.

The engine speed will reduce to idle when the tailgate lowers.

The tailgate will stop lowering when it reaches 1 metre and the 'Tailgate out-of-locks' pictogram will display on the control panel screen.

If the button is released while lowering the tailgate:

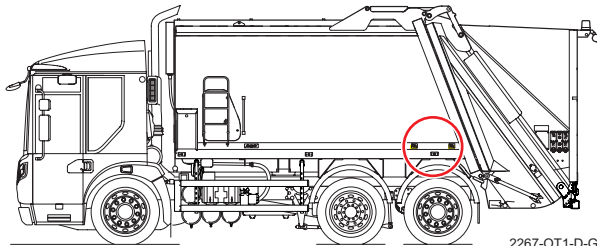
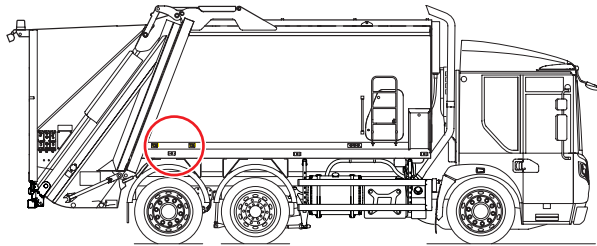
- The tailgate will stop in the position it is in until the button is operated again, or the external tailgate lowering control panel is operated to lower the tailgate.
- The 'Tailgate out-of-locks' pictogram will display on the control panel screen (A).



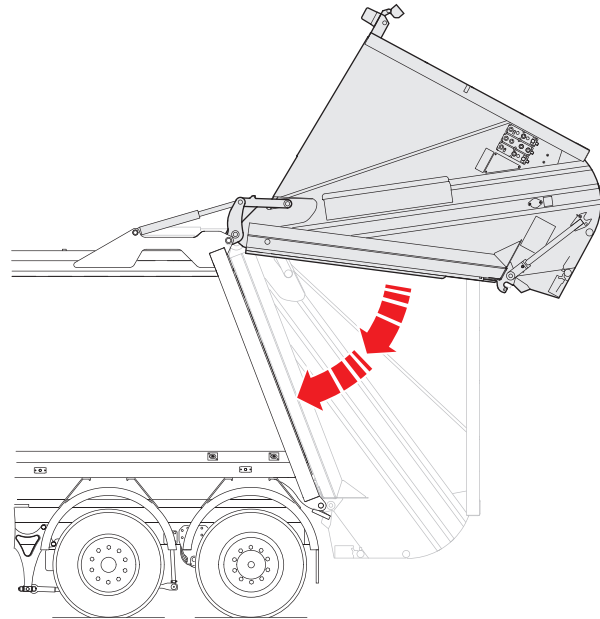
2266-OT1-D-GB-G2



4.8.22 Tailgate lowering control panel



2267-OT1-D-GB-G3



An external tailgate lowering control panel is located on the outer side of the corresponding body at the rear of the body.

- The left-hand control panel controls the left-hand tailgate.
- The right-hand control panel controls the right-hand tailgate.

Two 'Tailgate lower' push-buttons (1) are fitted.



Both push-buttons must be pressed simultaneously to lower the tailgate. This is a two handed operation.

The engine speed will reduce to idle when the tailgate lowers.

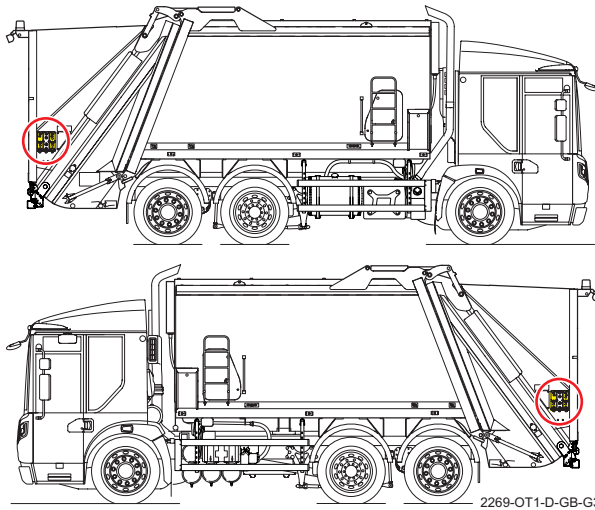
If either button is released while lowering the tailgate:

- The tailgate will stop in the position it is in until both buttons are operated again to lower the tailgate.
- The 'Tailgate out-of-locks' pictogram will display on the control panel screen (A).

2268-OT1-D-GB-G2



4.9 Compaction mechanism control station



The compaction mechanism control stations are located on the outer side of each tailgate. Each control station consists of two or more control panels according to vehicle specification.

The type of control panels used and the side on which they are fitted depends on the market the vehicle is being operated in and the type of waste container lifting device fitted, if any, as follows:

Right-hand drive vehicles

Right-hand drive vehicles are fitted with the following control panels:

Left-hand tailgate

- Control panel for the left-hand body compaction mechanism.
- Control panel for the right-hand body compaction mechanism.
- Control panel for the waste container lifting device if a waste container lifting device is fitted to the left-hand body.

Right-hand tailgate

- Control panel for the right-hand body compaction mechanism.
- Control panel for the waste container lifting device if a waste container lifting device is fitted to the right-hand body.

Left-hand drive vehicles

Left-hand drive vehicles are fitted with the following control panel:

Left-hand tailgate

- Control panel for the left-hand body compaction mechanism.
- Control panel for the waste container lifting device if a waste container lifting device is fitted to the left-hand body.

Right-hand tailgate

- Control panel for the left-hand body compaction mechanism.
- Control panel for the right-hand body compaction mechanism.
- Control panel for the waste container lifting device if a waste container lifting device is fitted to the right-hand body.

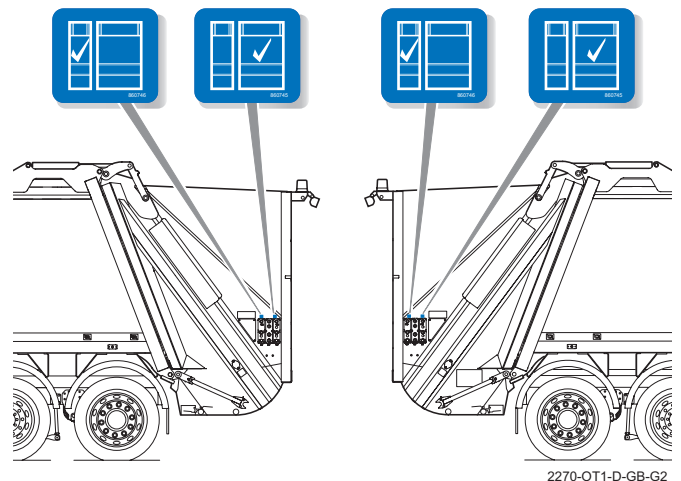
A label above each control panel identifies the compaction mechanism it controls:



Right-hand control station.



Left-hand control station.



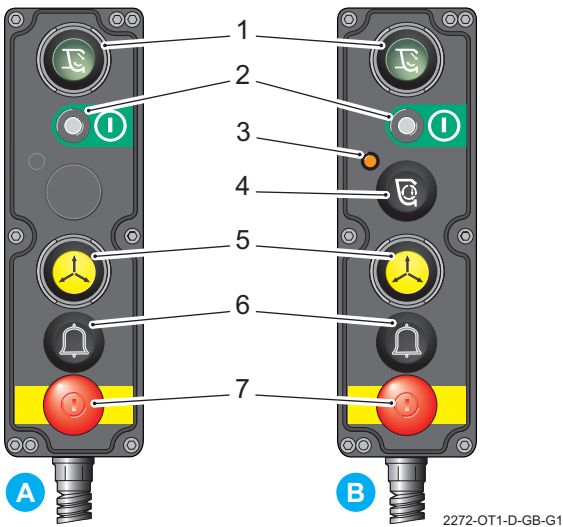


The type of control panel used depends on the type of waste container lifting device fitted, if any, as follows:

- A. Open system/Open waste container lifting device.
- B. Closed waste container lifting device.

The control panels contain combinations of the following controls:

1. Start pack cycle push-button (Green) (see '4.9.4 Start pack cycle push-button (green)' on page 4-48).
2. Control panel active warning lamp (Green).
3. Multi-cycle start switch active warning lamp (Amber).
4. Multi-cycle start switch (see '4.9.1 Multi-cycle start switch' on page 4-46).
5. Rescue push-button (Yellow)
6. Signal push-button (Black) (see '4.9.2 Signal push-button (black)' on page 4-47).
7. Emergency stop push-button (Red) (see '4.11 Emergency stop push-buttons' on page 4-52).



4.9.1 Multi-cycle start switch



Press and release the button to switch the function on or off; the amber warning light illuminates when the switch is in the on position.

On (Amber warning lamp on): Multi-cycle mode.

The compaction mechanism starts and completes a preset number of pack cycles automatically each time the 'Start pack cycle' push-button is operated.

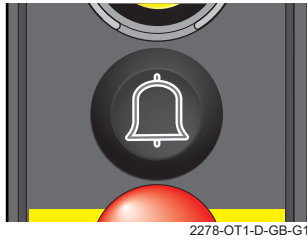
Note: The number of cycles is set during production according to individual customer requirements and can only be changed by a Dennis Eagle Authorised Service Engineer.

Off (Amber warning lamp off): Manual cycle mode.

The 'Start pack cycle' push-button has to be operated manually for the compaction mechanism to start a pack cycle.



4.9.2 Signal push-button (black)



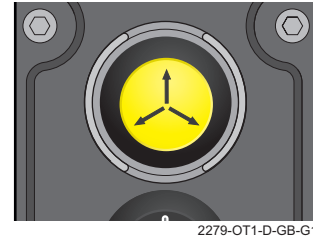
Pressing the 'Signal' push-button against spring action sounds the signal buzzer in the cab. The buzzer will sound while the button is pressed and will stop immediately the button is released.

At the same time, the 'Signal' warning pictogram will display on the control panel screen while the button is pressed (see '4.6 Warning pictograms' on page 4-15).



The signal buzzer will not sound if an 'Emergency stop' push-button is pressed.

4.9.3 Rescue push-button (yellow)



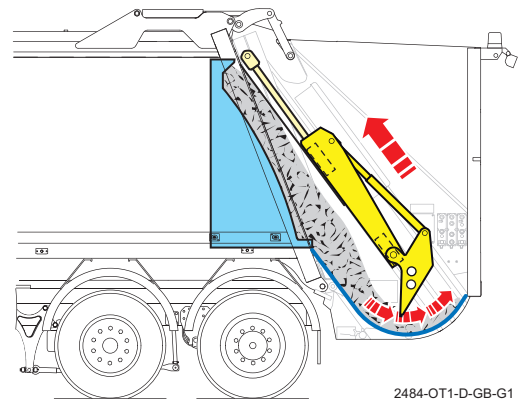
Pressing and holding the 'Rescue' push-button against spring action will:

- Cause the compaction mechanism packer plate to open and carriage plate to move upwards simultaneously and is used to reverse the mechanism away from the tailgate floor to enable jams to be cleared.
- Cause the 'Rescue' warning pictogram to display on the control panel screen.

The mechanism will continue to operate while the button is pressed.

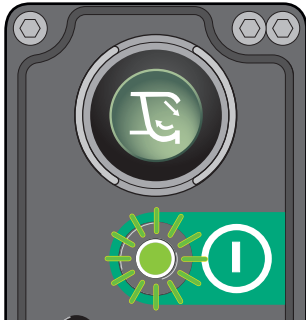
When the button is released, the mechanism will stop immediately.

The mechanism remains in the stopped position until the 'Body main' switch has been turned to off and then back to on and then one of the controls is pressed to operate the mechanism.





4.9.4 Start pack cycle push-button (green)



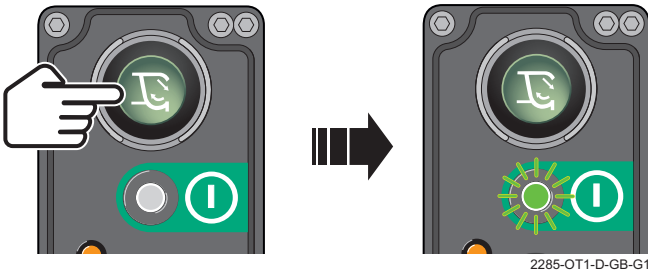
2284-OT1-D-GB-G1

Only one 'Start pack cycle' push-button can be energised at one time.

The green indicator lamp below the button will illuminate to confirm that the push-button is energised.

Each time the 'Body main' switch is turned to on, the 'Start pack cycle' push-button on the left-hand side of the vehicle will be energised.

To energise the opposite 'Start pack cycle' push-button, push the de-energised button once. The green indicator lamp below the button will illuminate to confirm that the push-button is now energised.



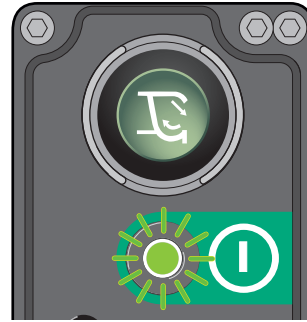
2285-OT1-D-GB-G1

Note: At the same time the green indicator lamp below the previously energised button will extinguish to confirm that the push-button is de-energised.

Vehicles fitted with a closed waste container lifting device.

Vehicles fitted with an open waste container lifting device and guide flap in raised position.

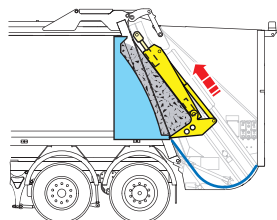
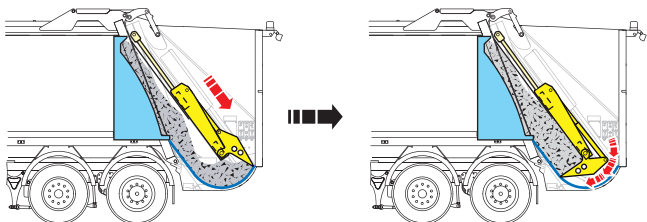
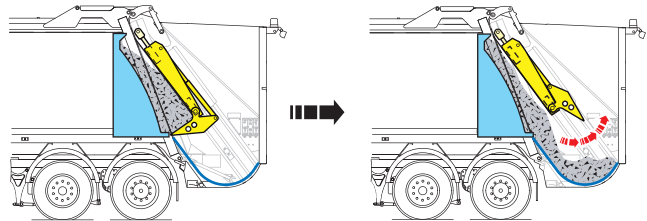
Vehicles fitted with an open waste container lifting device and a fixed extended rave rail.



2284-OT1-D-GB-G1

Pressing and releasing the push-button causes the following sequence of events.

- The engine speed will increase.
- The compaction mechanism will carry out one complete cycle and stop.
- The engine speed will slow down to idle.

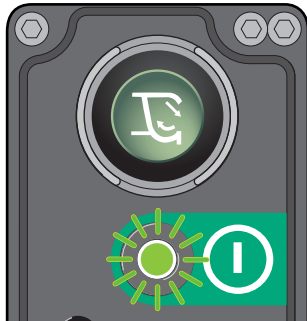


2292-OT1-D-GB-G1



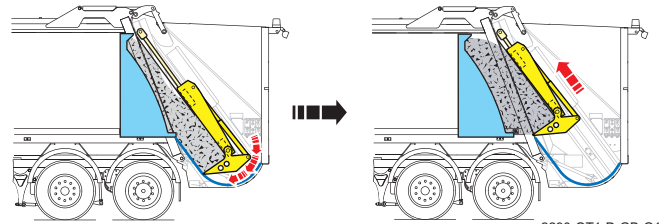
Open system vehicles (no waste container lifting device fitted).

Vehicles fitted with an open waste container lifting device and guide flap in lowered position.



2284-OT1-D-GB-G1

If the push-button is released after the packer plate has started to close, the packer plate will automatically close and then the carriage plate will move upwards until it is fully packed when it will stop.

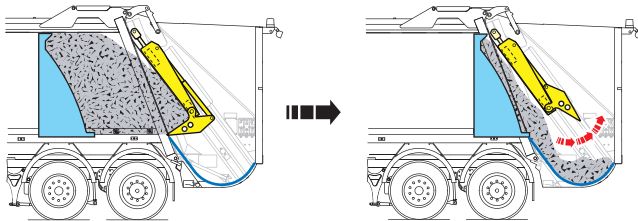


2290-OT1-D-GB-G1

Pressing and releasing the push-button causes the following sequence of events.

- The engine speed will increase.
- The compaction mechanism packer plate will open and then stop.
- The engine speed will slow down to idle.

The 'Start pack cycle' push-button must be operated again to complete the compaction cycle.



2289-OT1-D-GB-G1

Pressing the push-button a second time and holding the push-button until the mechanism stops causes the following sequence of events.

- The engine speed will increase.
- The compaction mechanism carriage plate will move downwards and then stop.
- The engine speed will slow down to idle.

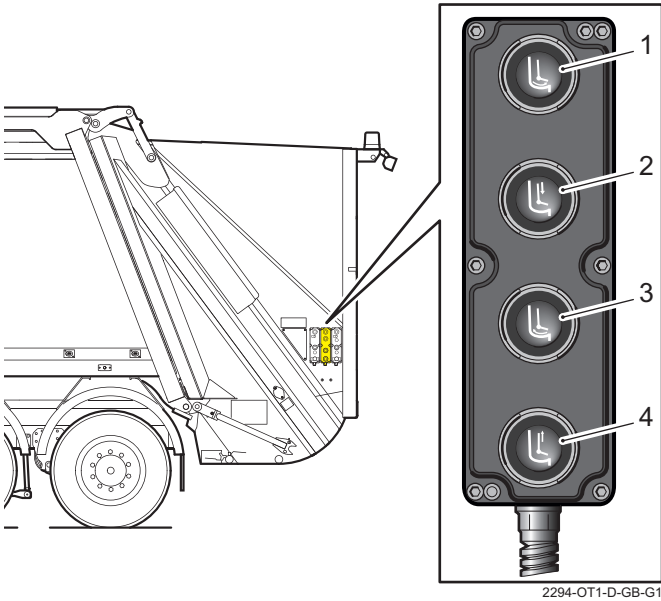
The 'Start pack cycle' push-button must be operated a third time to complete the compaction cycle.

Pressing and holding the push-button causes the following sequence of events:

- The engine speed will increase.
- The compaction mechanism packer plate will begin to close.



4.10 Packing sequence control panel (option)



Packing sequence controls may be fitted as a customer option.

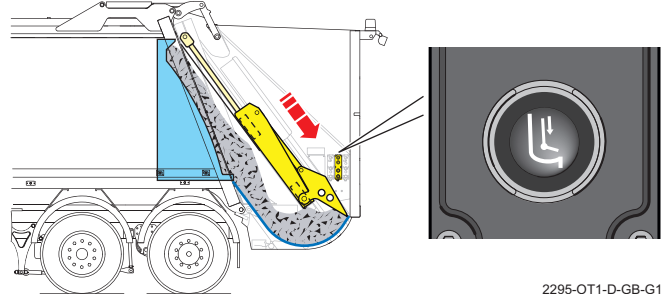
These control panels feature 4 push-buttons:

1. Open packer plate (see '4.10.3 Open packer plate' on page 4-51).
2. Carriage plate down (see '4.10.1 Carriage plate down' on page 4-50).
3. Close packer plate (see '4.10.4 Close packer plate' on page 4-51).
4. Carriage plate up (see '4.10.2 Carriage plate up' on page 4-50).

4.10.1 Carriage plate down

Pressing and holding the 'Carriage plate down' push-button causes the carriage plate to move down.

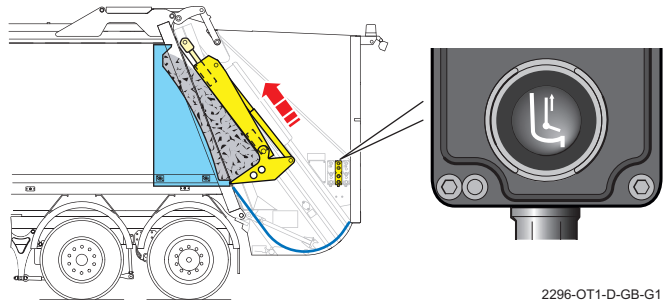
If the button is released, the compaction mechanism will stop.



4.10.2 Carriage plate up

Pressing and holding the 'Carriage plate up' push-button causes the carriage plate to move up.

If the button is released, the compaction mechanism will stop.

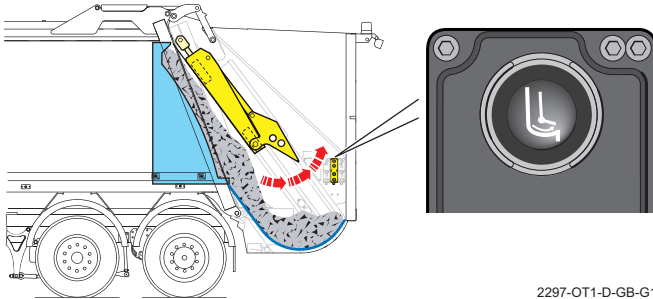




4.10.3 Open packer plate

Pressing and holding the 'Open packer plate' push-button causes the packer plate to open.

If the button is released, the compaction mechanism will stop.

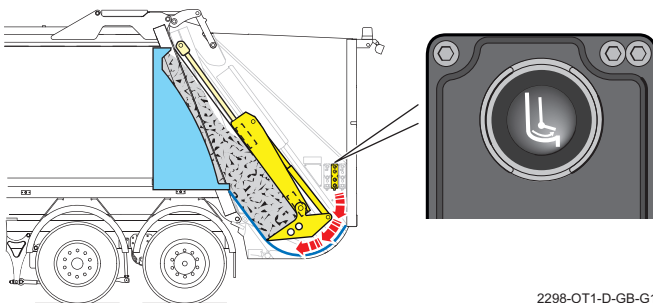


2297-OT1-D-GB-G1

4.10.4 Close packer plate

Pressing and holding the 'Close packer plate' push-button causes the packer plate to close.

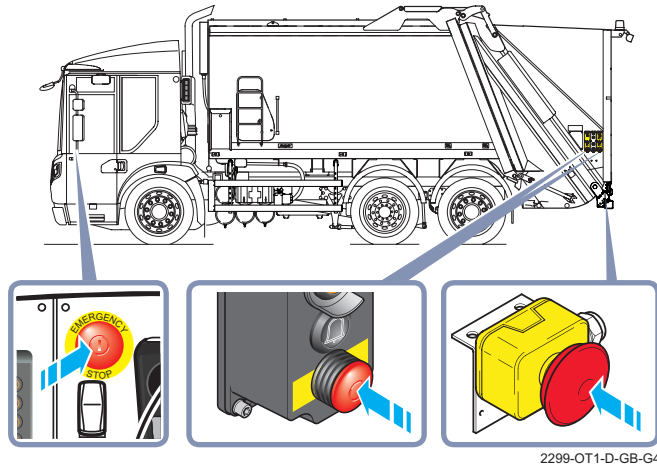
If the button is released, the compaction mechanism will stop.



2298-OT1-D-GB-G1



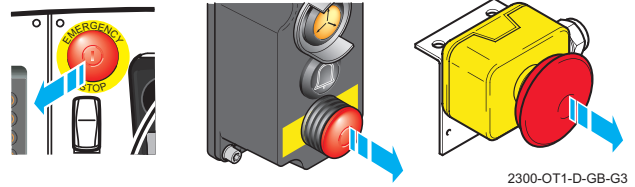
4.11 Emergency stop push-buttons



4.11.1 Resetting an emergency stop push-button

To reset an 'Emergency stop' push-button.

1. Pull the button outwards.



2. Turn the 'Body main' switch off and on.

Emergency stop push-buttons are located:

- On the cab control panel.
- On each compaction mechanism control panel.
- Beneath the rave rail on open system vehicles.
- On the waste container lifting device control panel.

Operation of any one 'Emergency stop' push-button will:

- Stop all refuse operations except the rescue function instantly (including waste container lifting device functions, if fitted).
- Cause the 'Emergency stop operated' buzzer in the cab control panel to sound.
- Cause the 'Emergency stop operated' pictogram to display in the control panel screen (see '4.6 Warning pictograms' on page 4-15).



Operations cannot be resumed until the push-button is reset.



Olympus Twin Pack Operator's Handbook

CONTENTS		PAGE
5	Operating the machine	5-3
5.1	Operational safety	5-3
5.1.1	Body selection.....	5-3
5.1.2	Packer plate opening.....	5-3
5.1.3	Carriage plate moving down	5-3
5.1.4	Packer plate closing	5-3
5.1.5	Carriage plate moving up	5-3
5.2	Loading refuse.....	5-4
5.2.1	Introduction.....	5-4
5.2.2	Loading the hopper.....	5-4
5.3	Operating the controls.....	5-5
5.3.1	Introduction.....	5-5
5.3.2	Energising the control panels.....	5-5
5.3.3	Operating the compaction mechanism controls	5-7
5.3.4	Manual loading cycle	5-8
5.3.5	Automatic loading cycle.....	5-9
5.3.6	Rescue.....	5-10
5.3.7	Emergency stop.....	5-10
5.3.8	Short stroke cycle operation.....	5-12
5.3.9	Operation using packing sequence controls.....	5-13
5.4	Discharging refuse.....	5-14
5.4.1	Discharging refuse using in-cab controls	5-14
5.4.2	Discharging refuse using external controls.....	5-18
5.5	Tailgate out of locks/autobrake interlock (option)	5-21
5.6	Overriding the tailgate out of locks/autobrake interlock.....	5-21
5.7	Propping/unpropping the tailgate	5-22
5.7.1	To prop the tailgate.....	5-22
5.7.2	To unprop the tailgate.....	5-25
5.8	System warnings	5-28
5.8.1	Hydraulic oil temperature warning.....	5-28
5.8.2	Body full - collection complete.....	5-28
5.8.3	Body not full - compaction mechanism jammed.....	5-28
5.8.4	Recurring fault.....	5-28
5.9	Breakdown.....	5-28
5.9.1	Refuse collection bodywork breakdown.....	5-28
5.9.2	Chassis-cab breakdown.....	5-28



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5 Operating the machine



WARNING:
OPERATIVES MUST HAVE A GOOD KNOWLEDGE OF HOW THE EQUIPMENT WORKS.

5.1 Operational safety



WARNINGS:
IMPORTANT - BEFORE OPERATING THE REFUSE MECHANISM, OPERATIVES MUST HAVE READ AND UNDERSTOOD ALL APPLICABLE SAFETY PRECAUTIONS, INCLUDING THE CODE OF PRACTICE FOR THE SAFE OPERATION OF REAR END LOADERS AND REFUSE COLLECTION VEHICLES PUBLISHED BY THE CONTAINER HANDLING EQUIPMENT MANUFACTURERS (CHEM), AND CHAPTER 2 OF THIS MANUAL.

BEFORE OPERATING THE VEHICLE MAKE SURE THERE IS NO REFUSE, PAPER OR FLAMMABLE MATERIALS NEAR THE ENGINE OR EXHAUST. THESE COULD CAUSE A FIRE WHEN THE ENGINE IS STARTED. IF NECESSARY, TILT THE CAB (SEE CHASSIS-CAB MANUFACTURER'S OPERATOR'S HANDBOOK) TO MAKE A THOROUGH INSPECTION.

THE OLYMPUS TWIN PACK BODY HAS TWO TAILGATES, TWO COMPACTION MECHANISMS AND TWO EJECTION PLATES THAT CAN WORK INDEPENDENTLY:

- **MAKE SURE THAT YOU SELECT THE CORRECT BODY, BEFORE YOU START ANY OPERATION .**
- **WHEN YOU CROSS THE REAR OF THE VEHICLE MAKE SURE THAT YOU KNOW WHICH TAILGATE MECHANISM IS OPERATING.**
- **MAKE SURE THAT THE ROAD IS CLEAR BEFORE YOU STEP OUT INTO THE ROAD TO OPERATE ANY CONTROLS.**

IN ADDITION, THE FOLLOWING SAFETY INSTRUCTIONS MUST BE ADHERED TO DURING THE VARIOUS PHASES OF THE OPERATING CYCLE MENTIONED IN THIS SECTION.

5.1.1 Body selection

1. Select either wide or narrow body according to discharge requirements.
2. On 35/65 and 40/60 bodies always discharge the Left-hand (Narrow) body before discharging the Right-hand (Wide) body.

5.1.2 Packer plate opening

1. Operatives must keep clear of the loading area at all times during the compaction cycle as refuse can fall back into the tailgate.
2. Do NOT overload the tailgate as the packer plate can push refuse out of the tailgate onto operatives causing damage or injury.

5.1.3 Carriage plate moving down

1. When moving the carriage plate down under manual control always ensure the loading area is clear.
2. When moving down, the carriage plate can crush and then deflect an object from the tailgate. Operatives must stand well clear of the tailgate to avoid possible injury.
3. If using manual control to move the carriage plate down, short stroke should be used to prevent the packer plate pushing refuse rearwards over the rave rail.

5.1.4 Packer plate closing

1. If refuse escapes under or around the side of the packer plate when it is closing, operatives must never reach into the tailgate to assist.

5.1.5 Carriage plate moving up

1. If refuse or liquid escapes through the gap between the body and tailgate, the joint seal is probably in need of renewing and must be reported to supervision.
2. If the tailgate locks show signs of damage report to supervision.
3. Liquid can sometimes squirt from small gaps around the compaction mechanism, operatives must stand well clear when the carriage plate is moving up.



5.2 Loading refuse

5.2.1 Introduction

The operating cycle comprises operating sequences, which depend on the refuse collection vehicle configuration and use.

Open system/open waste container lifting device variants

The operating cycle comprises five operating sequences:

1. Start loading cycle (see '5.3.4 Manual loading cycle' on page 5-8).
2. Emergency stop (see '5.3.7 Emergency stop' on page 5-10).
3. Rescue (see '5.3.6 Rescue' on page 5-10).
4. Cycle short stroke operation (see '5.3.8 Short stroke cycle operation' on page 5-12).

Closed waste container lifting device variant

The operating cycle comprises four operating sequences:

1. Start an automatic loading cycle (see '5.3.5 Automatic loading cycle' on page 5-9).
2. Emergency Stop (see '5.3.7 Emergency stop' on page 5-10).
3. Rescue (see '5.3.6 Rescue' on page 5-10).
4. Cycle short stroke operation (see '5.3.8 Short stroke cycle operation' on page 5-12).

Dual mode variants

Some waste container lifting device systems offer the option of selecting an open or closed system operation by the positioning of a hinged/moveable guide flap that has a low or high operating position. With the guide flap positioned low (see Fig. 5-1, A), the compaction mechanism will operate as an Open System. With the guide flap positioned high (see Fig. 5-1, B), the compaction mechanism will operate as the closed waste container lifting device variant.

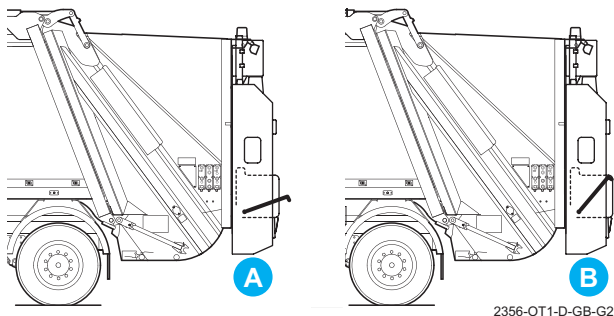


Fig. 5-1 Dual mode vehicle, guide flap

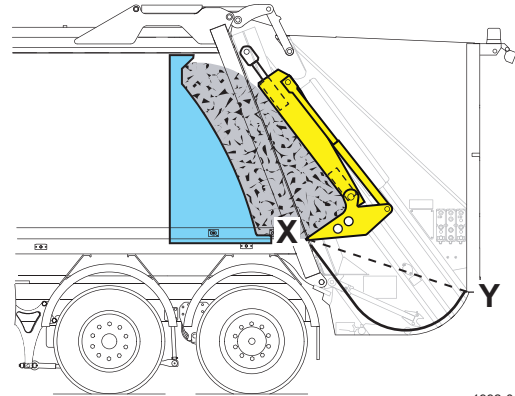
- A. Guide flap at low position.
- B. Guide flap at high position.

5.2.2 Loading the hopper



Caution:
Do not to overfill the hopper when loading refuse.

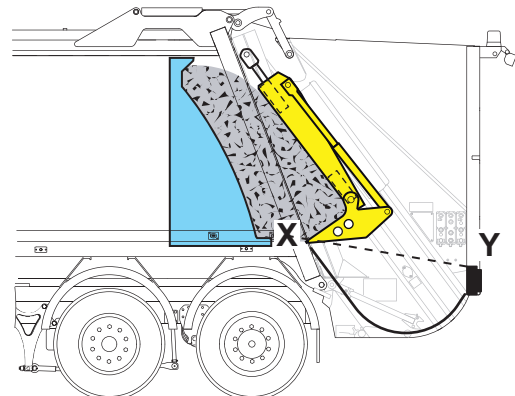
During loading, refuse must not be allowed to accumulate above the level of the tailgate structural rave rail, i.e. above a line extending from where the hopper floor meets the body floor (X) and the top of the structural rave rail (Y).



Overloading may cause damage to the rave rail, waste container lifting device frame or waste container lifting device.

Vehicles with rave rail extension

Most open system vehicles are fitted with a structural rave rail extension. On these vehicles refuse can be loaded to a higher level.





5.3 Operating the controls

5.3.1 Introduction

All operating cycle sequences of the compaction mechanism are operated using the control panels mounted on the side of the tailgate.

Discharging the refuse is normally achieved using the cab control panel, although external controls may be fitted as an option.



Cautions:
When switching the ignition on, allow the screen to complete its self test sequence before operating any of the body system functions.

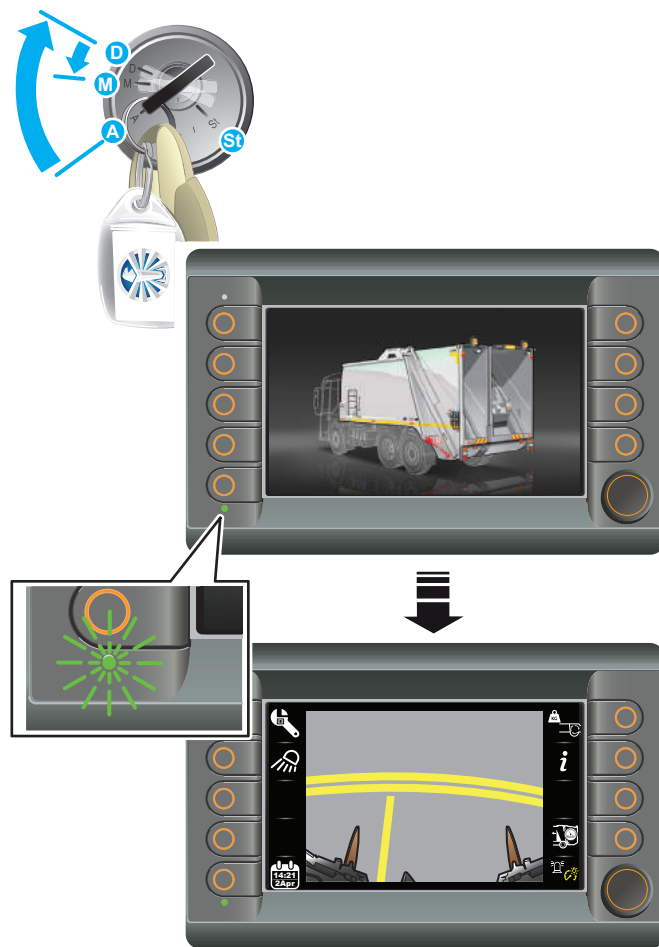
Always turn the 'Body main' switch to off when the body control systems are not being used.

5.3.2 Energising the control panels

To prevent unauthorised use, the compaction mechanism controls are energised by operating switches on the cab control panel.

The control panels are energized as follows.

1. Switch the ignition on, then start and run the engine.
 - The cab control panel will initialise and then display the 'Body system off' mode.



3885-OT1-D-GB-G2

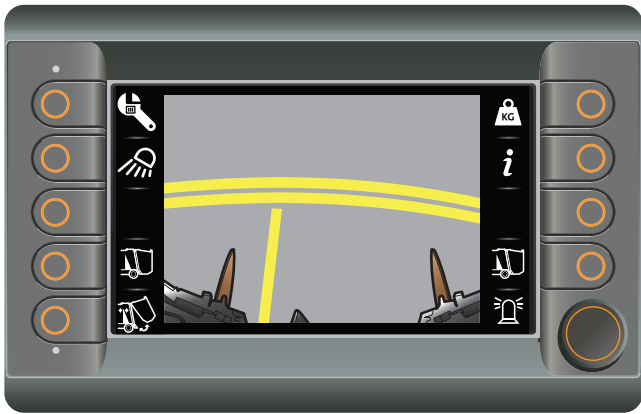
OPERATING THE MACHINE



2. Turn the 'Body main' switch on.

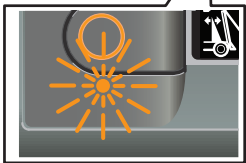
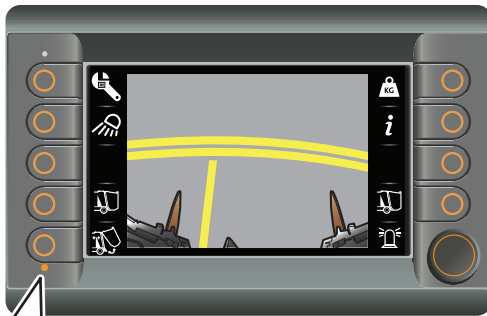


- The screen will display the 'Body system run' mode.



2248-OT1-D-GB-G6

If LED below the left-hand bank of switches flashes amber, turn the 'Body main' switch to off and then back to on.



2365-OT1-D-GB-G5

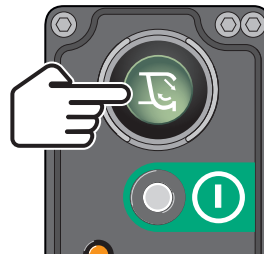


WARNING:
IF A WARNING PICTOGRAM DISPLAYS IN THE MESSAGE AREA OF THE SCREEN, INVESTIGATE AND RECTIFY THE CAUSE OF THE WARNING BEFORE OPERATING THE SYSTEM.



2367-OT1-D-GB-G7

- The compaction mechanism controls are now energised.
- If necessary, press and release the de-energised 'Start pack cycle' push-button to activate it.



2285-OT1-D-GB-G1

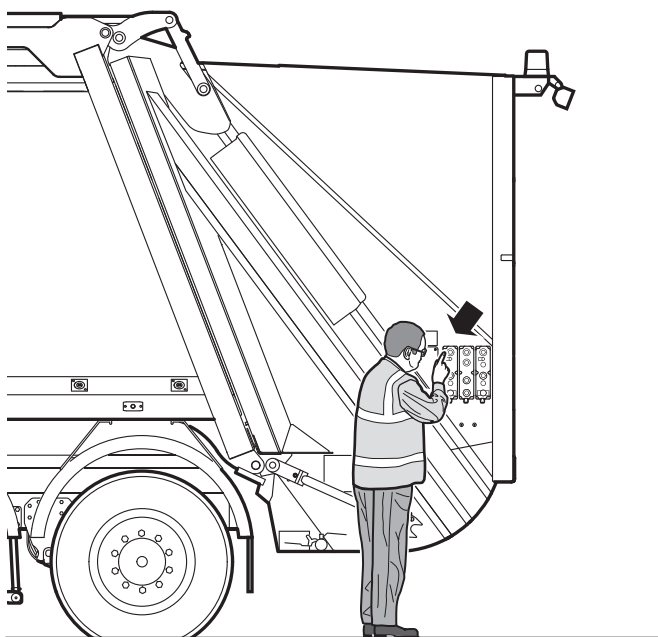


5.3.3 Operating the compaction mechanism controls

When operating the compaction mechanism controls stand beside the control panel and observe the operation of the compaction mechanism through the observation window, arrowed.



WARNING:
OPERATIVES MUST KEEP CLEAR OF THE LOADING AREA AT ALL TIMES DURING THE COMPACTION CYCLE AS REFUSE CAN FALL BACK INTO THE TAILGATE.



1991-01-OT1-GB



5.3.4 Manual loading cycle

Open system/open waste container lifting device variant with guide flap at lowest position.

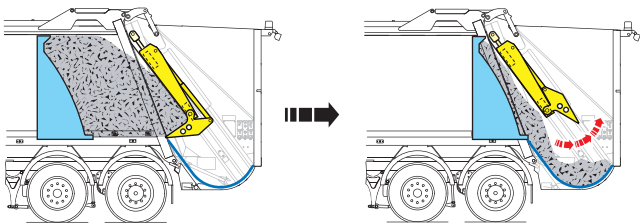
To start manual loading cycle:

1. Check that the tailgate area is clear.
2. Press and release the 'Start pack cycle' push-button on the compaction mechanism control panel.



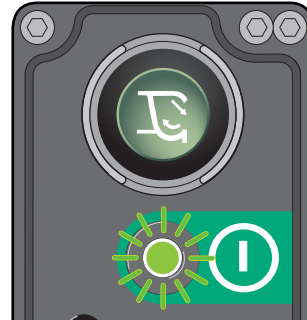
2284-OT1-D-GB-G1

- The engine speed will increase.
- The compaction mechanism packer plate will open and stop.
- The engine speed will slow down to idle.



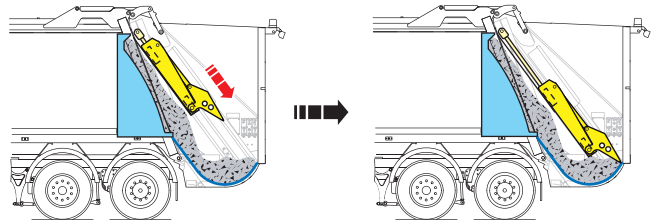
2289-OT1-D-GB-G1

3. Press the 'Start pack cycle' push-button again and keep it depressed until the mechanism stops.



2284-OT1-D-GB-G1

- The engine speed will increase.
- The carriage plate will move downwards and then stop.



2362-OT1-D-GB-G1

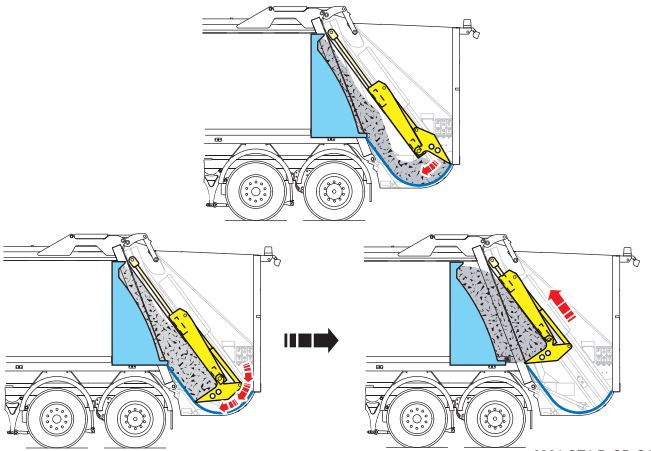
4. Press and hold the 'Start pack cycle' push-button.



2284-OT1-D-GB-G1



5. When the packer plate starts to close, release the 'Start pack cycle' push-button.
 - The packer plate will continue to close and the carriage plate will move upwards automatically.



Cautions:
 While it is possible for a vehicle to be driven between stops during the automatic part of the loading cycle, the driver does NOT control the minimum road speed as minimum engine speed is governed by operation of the compaction mechanism. Should an emergency arise, turn the 'Body main' switch to Off to return the engine speed to idle.



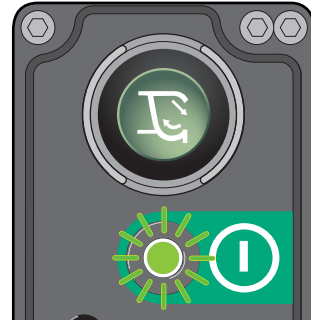
Alternatively, if a manual gearbox is fitted, declutch and apply the brakes.

5.3.5 Automatic loading cycle

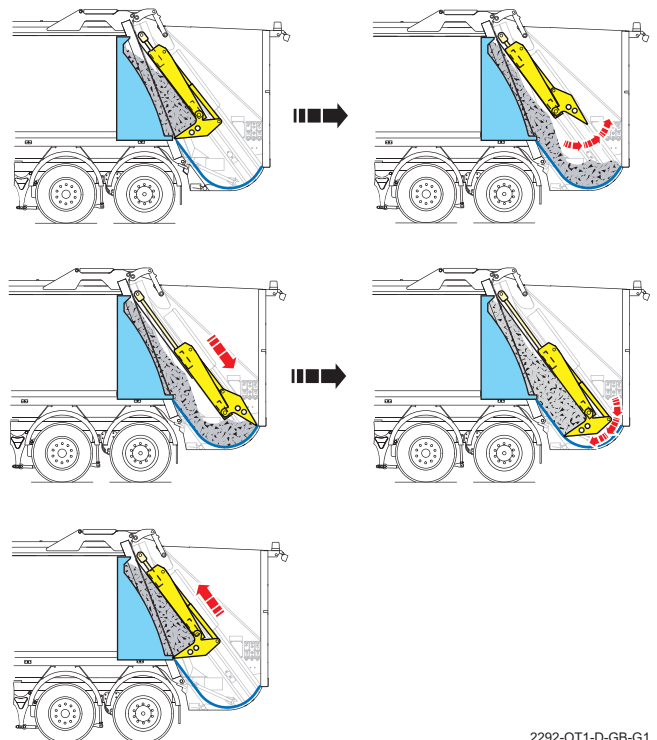
Closed waste container lifting device variants only

To start automatic loading cycle:

1. Check that the tailgate area is clear.
2. Press and release the 'Start pack cycle' push-button on the compaction mechanism control panel.



- The engine speed will increase. The compaction mechanism will carry out one complete cycle and stop. The engine speed will slow down to idle.

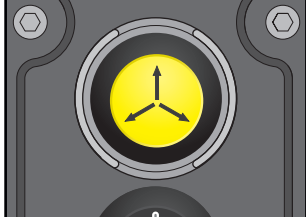




5.3.6 Rescue

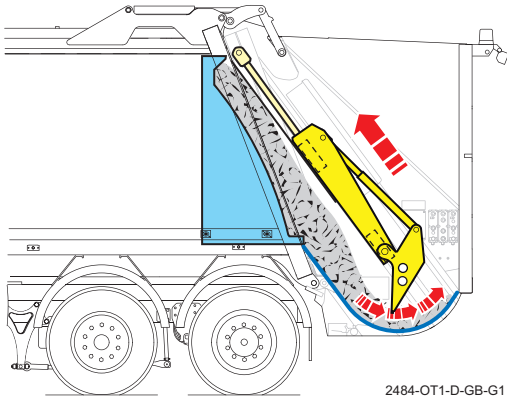
To reverse the mechanism:

1. Press and hold down the 'Rescue' push-button on the compaction mechanism control panel.



2279-OT1-D-GB-G1

- The packer plate will open and the carriage plate will move upwards simultaneously from any position.



2484-OT1-D-GB-G1

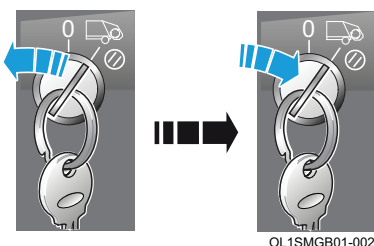
- The 'Rescue' warning pictogram will display on the control panel screen.



Note: It is not necessary to stop the mechanism before pressing the Rescue push-button, it can be pressed any time during the loading cycle. Pressing the 'Rescue' push-button will automatically stop the loading cycle. The function is also available when an 'Emergency stop' push-button has been pressed, or when Drive or Reverse has been selected on the vehicle's automatic transmission. The engine speed will not increase.

When the button is released, the mechanism will stop immediately.

Turn the 'Body main' switch off and then on again.

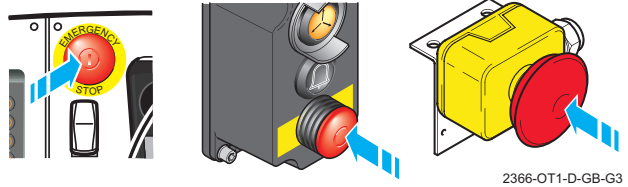


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5.3.7 Emergency stop

To stop the mechanism in an emergency, either:

1. Press any 'Emergency stop' push-button.



2366-OT1-D-GB-G3

- The 'Emergency stop' buzzer in the cab will sound.
- The 'Emergency stop operated' pictogram will display in the control panel screen.



- All refuse operations (including waste container lifting device functions, if fitted) except the rescue function will stop instantly.

or;

2. Turn the 'Body main' switch to off.



- The screen will display the 'Body system off' mode.



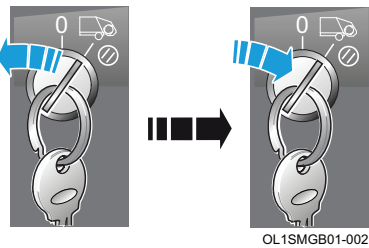
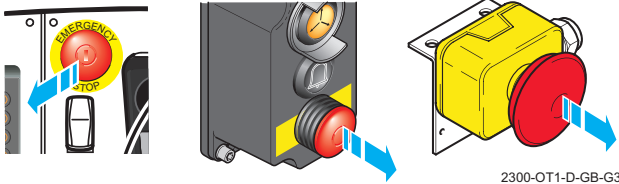
2241-OT1-D-GB-G6



OPERATING THE MACHINE

To resume the loading cycle, either:

1. Pull out the 'Emergency stop' push-button, and then turn the 'Body main' switch off and then on again.



- The 'Emergency stop operated' pictogram will stop displaying in the control panel screen.

or (if the mechanism has been stopped by turning the 'Body main' switch off);

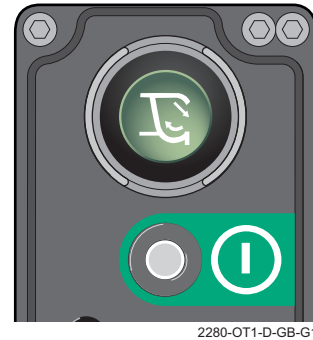
2. Turn the 'Body main' switch to on.



- The screen will display the 'Body system run' mode.



3. Press the 'Start pack cycle' push-button on the compaction mechanism control panel.

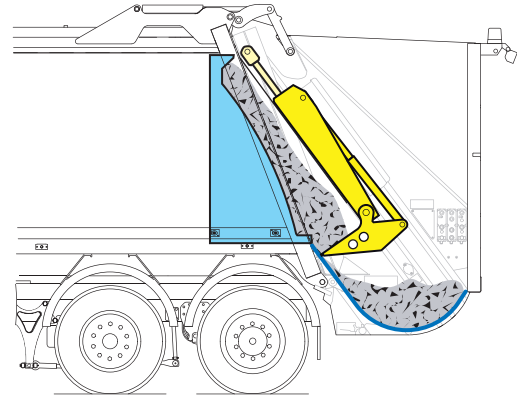




5.3.8 Short stroke cycle operation

Closed waste container lifting device variants only

If the tailgate is overloaded, the refuse cannot be contained as the carriage plate and packer plate descend.

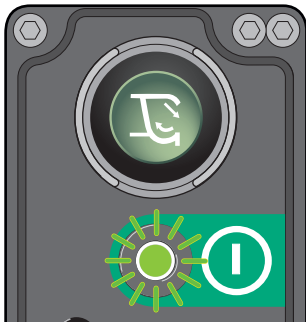


2368-01-OT1-GB

This may result in the packer plate pushing refuse out of the tailgate.

In this case a short stroke cycle can be executed by taking the following action:

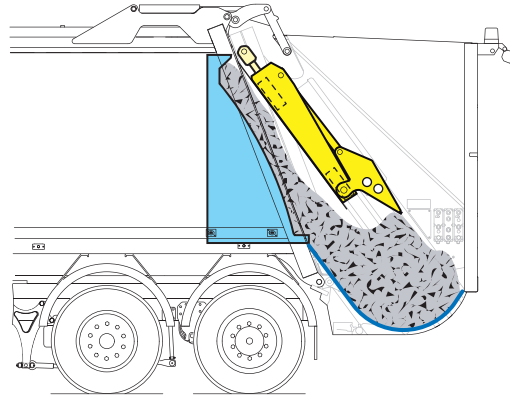
1. Press and release the 'Start pack cycle' push-button on the compaction mechanism control panel.



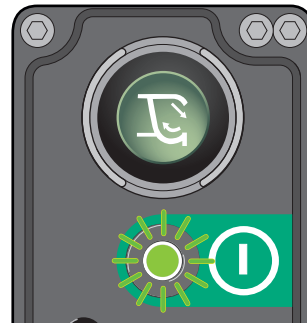
2284-OT1-D-GB-G1

- The packer plate will open.
- The carriage plate will move downwards.

2. When the packer plate engages the refuse anywhere while the carriage plate is moving downwards, press and release the 'Start pack cycle' push-button again.

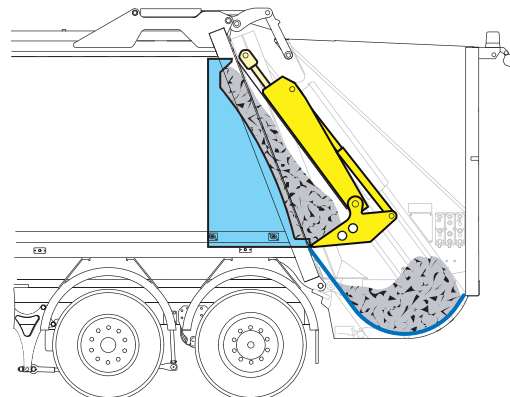


2374-01-OT1-GB



2284-OT1-D-GB-G1

- The packer plate will begin to close early and the carriage plate will move upwards in the normal manner.



2375-01-OT1-GB

3. Repeat this operation until the tailgate is clear.



5.3.9 Operation using packing sequence controls

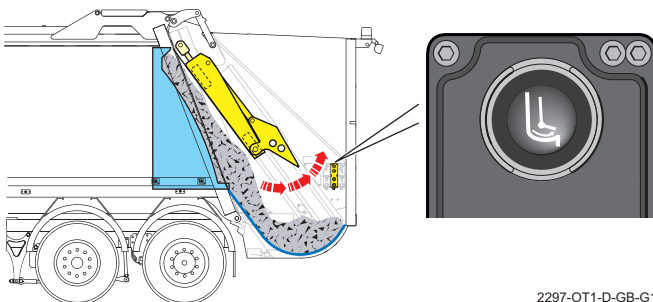


Cautions:
If the packing sequence controls are used to operate the compaction mechanism, it is important that the mechanism is returned to the fully packed position (i.e. the packer plate is closed and the carriage plate is fully raised) before using any other controls to operate compaction mechanism.

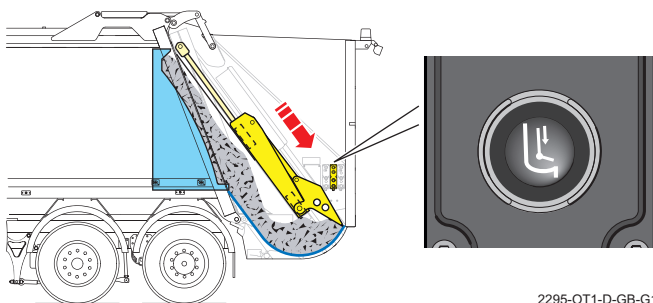
Note: On some vehicles fitted with footboards, operation of the packing sequence controls is inhibited when the footboard is occupied.

To use the packing sequence controls:

1. Check that the tailgate area is clear.
2. Press and hold the 'Open packer plate' push-button until the packer plate is fully open.

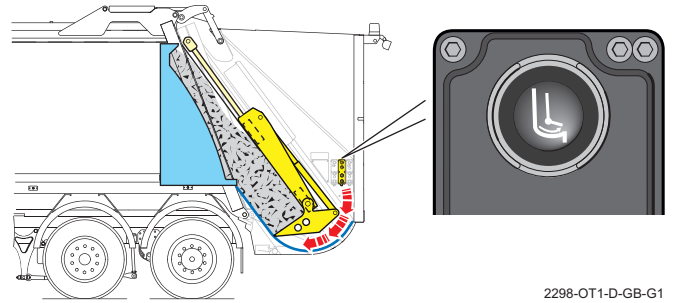


3. Press and hold the 'Carriage plate down' push-button to move the carriage plate and packer plate downwards to engage the refuse.

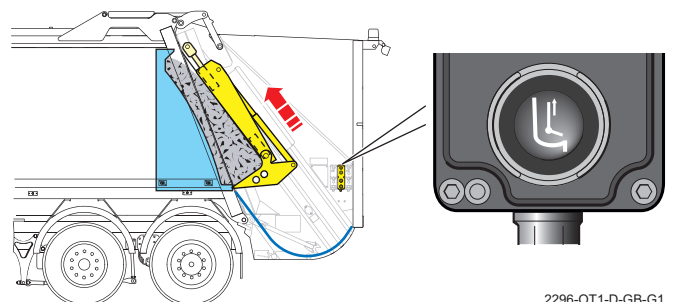


Note: This switch function is inhibited on Open System variants or when a guide flap is in the lowered position. Press and hold the 'Start pack cycle' push-button (see '4.9.4 Start pack cycle push-button (green)' on page 4-48) to move the carriage plate and packer plate downwards to engage the refuse.

4. Press and hold the 'Close packer plate' push-button until the packer plate is fully closed.



5. Press and hold the 'Carriage plate up' push-button to move the carriage plate and packer plate upwards until the mechanism is fully packed.





5.4 Discharging refuse



WARNINGS:
DISCHARGE ONLY ONE BODY AT A TIME.

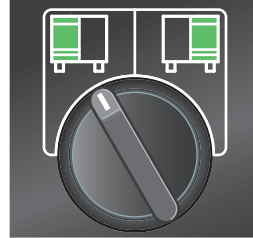
ON 35/65 AND 40/60 BODIES ALWAYS DISCHARGE THE LEFT-HAND (NARROW) BODY BEFORE DISCHARGING THE RIGHT-HAND (WIDE) BODY.

MAKE SURE THAT YOU KNOW THE HEIGHT OF YOUR VEHICLE WITH THE TAILGATE AND WASTE CONTAINER LIFTING DEVICE, IF FITTED, RAISED.

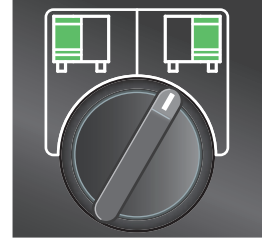
AFTER DISCHARGING THE REFUSE, MAKE SURE THERE IS NO REFUSE, PAPER OR FLAMMABLE MATERIALS NEAR THE ENGINE OR EXHAUST. THESE COULD CAUSE A FIRE WHEN THE ENGINE IS STARTED. IF NECESSARY, TILT THE CAB (SEE CHASSIS-CAB MANUFACTURER'S OPERATOR'S HANDBOOK) TO MAKE A THOROUGH INSPECTION.

5.4.1 Discharging refuse using in-cab controls

1. Ensure the vehicle is suitably positioned on stable ground and the rear of the vehicle is clear.
2. Turn the 'Body selector' switch to select either the left-hand or right-hand body.

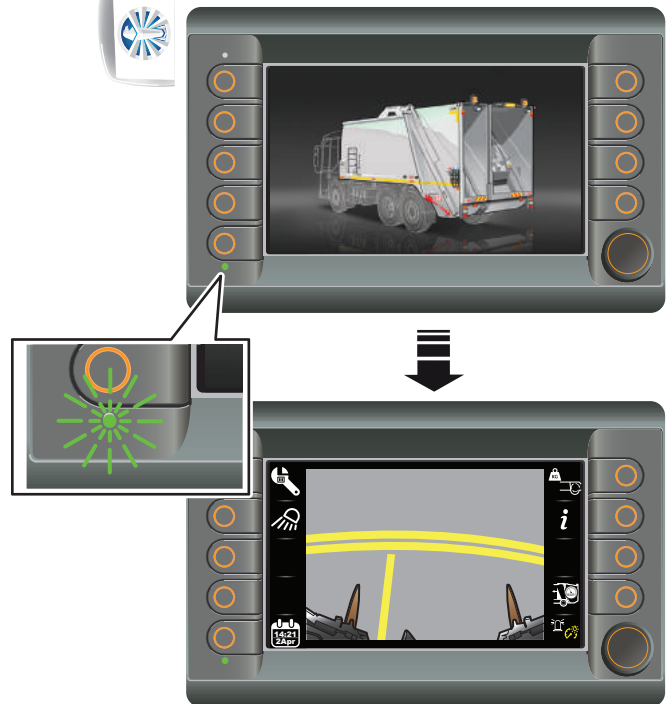
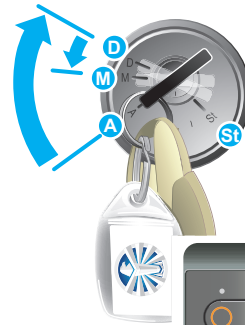


2243-OT1-D-GB-G2



2244-OT1-D-GB-G2

3. Switch the ignition on, then start and run the engine.
 - The cab control panel will initialise and then display the 'Body system off' mode.



3885-OT1-D-GB-G2



OPERATING THE MACHINE

4. Turn the 'Body main' switch on.

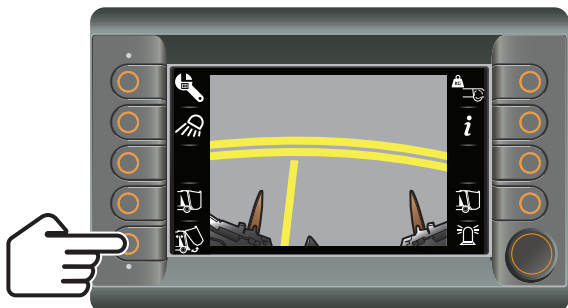


- The screen will display the 'Body system run' mode.



2248-OT1-D-GB-G6

5. Press and release the internal discharge switch.



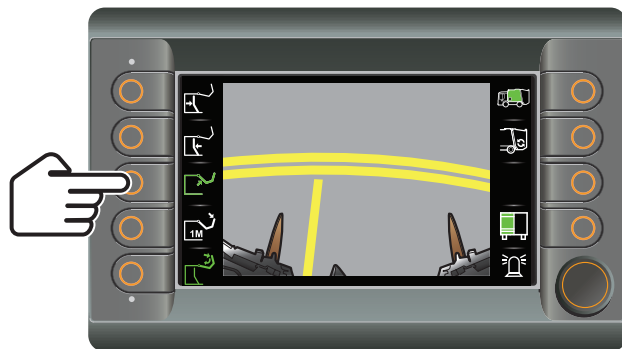
2354-OT1-D-GB-G4

- The screen will display the 'Body discharge internal controls' mode.

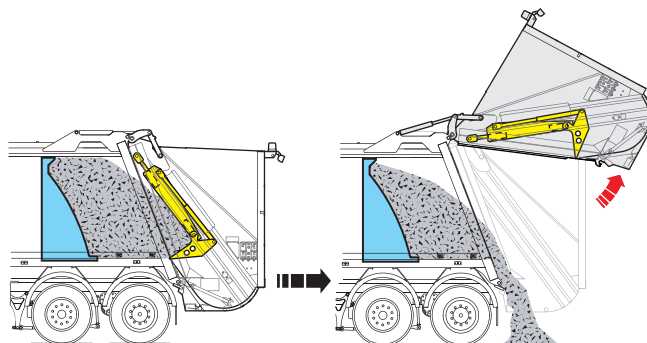


WARNING:
MAKE SURE THAT YOU KNOW THE HEIGHT OF YOUR VEHICLE WITH THE TAILGATE RAISED.

6. Press and hold the tailgate raise switch until the tailgate is fully raised and then release the switch.



2490-OT1-D-GB-G3

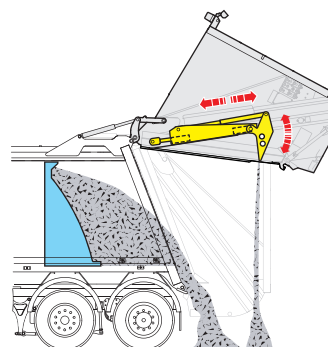


1985-01-OT1-GB-G1

- When the tailgate is fully raised, the 'Tailgate raised' pictogram will display on the control panel screen.



- If the 'Tailgate clear' cycle function has not been switched off, the compaction mechanism will perform one packing cycle to clear refuse from the tailgate.

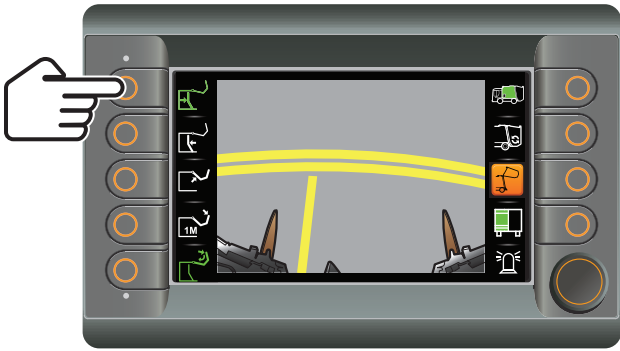


2377-OT1-D-GB-G2

OPERATING THE MACHINE

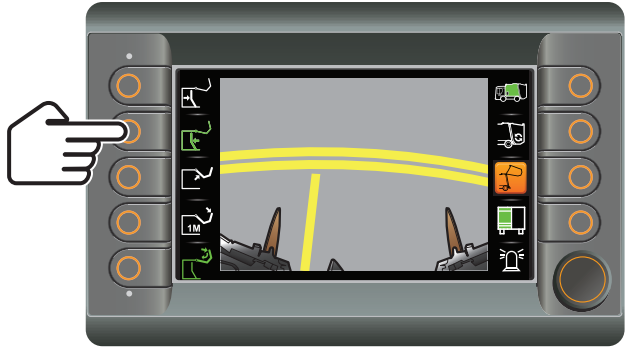


7. Press and hold the eject switch to discharge contents of the body. Release the switch when discharging has been completed.

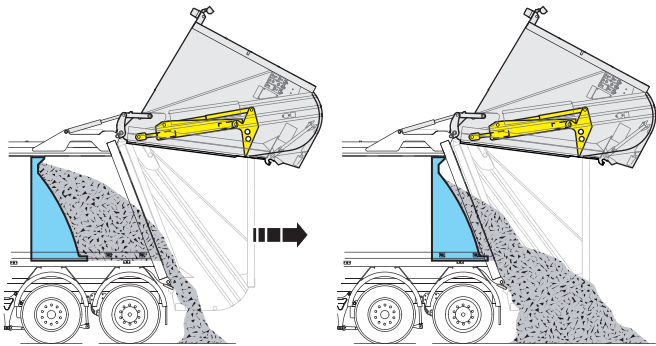


2491-OT1-D-GB-G3

8. If travelling a long distance, press and hold the retract switch to position the ejector plate at the front of the body to prevent bounce on the hydraulic cylinder.

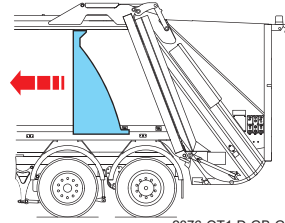


2492-OT1-D-GB-G3



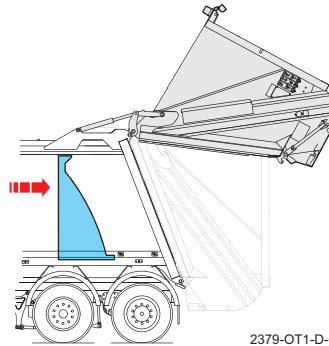
1984-01-OT1-GB-G1

Leave the ejector plate at rear of body ready for next collection.



2376-OT1-D-GB-G1

Move the ejector plate to the rear of the body at the first collection point.



2379-OT1-D-GB-G2

Note: The tailgate must be raised until it is 'Out-of-locks' before the ejector plate can be moved.



OPERATING THE MACHINE



WARNINGS:
MAKE SURE THAT THE TAILGATE AREA IS CLEAR OF PERSONNEL.

MAKE SURE THAT YOU KNOW THE HEIGHT OF YOUR VEHICLE WITH THE TAILGATE AND WASTE CONTAINER LIFTING DEVICE, IF FITTED, RAISED.

9. Move the vehicle to a safe area.



WARNINGS:
MAKE SURE THAT THE TAILGATE AREA AND BODY/TAILGATE SEAL IS CLEAR OF DEBRIS BEFORE LOWERING TAILGATE.

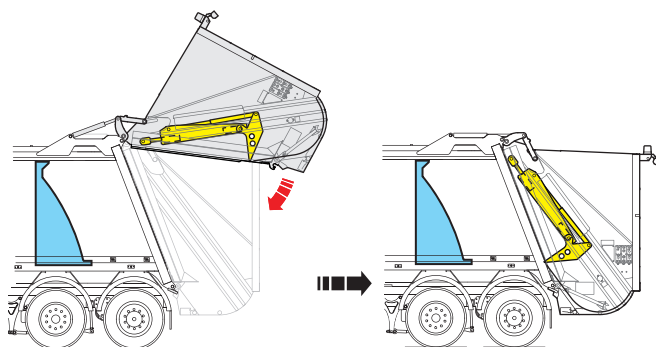
ALWAYS INSERT THE TAILGATE PROPS TO SUPPORT THE TAILGATE IF CLEANING REQUIRES YOU TO WORK BENEATH IT.

THE TAILGATE SEAL SHOULD BE KEPT IN GOOD CONDITION AND REPLACED IF DAMAGED.

10. Press the two push-buttons on the 'Tailgate lowering' control panel simultaneously to lower the tailgate fully into its locks.



2387-OT1-D-GB-G1



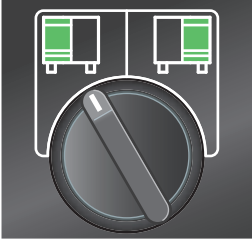
1986-01-OT1-GB-G1

- The engine speed will lower to tick-over.
- When the tailgate is lowered fully and engaged in its locks, the tailgate raised pictogram will stop displaying on the control panel screen.

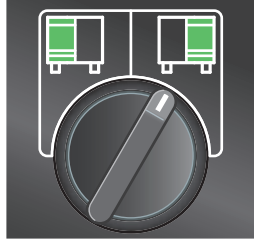


5.4.2 Discharging refuse using external controls

1. Ensure the vehicle is suitably positioned on stable ground and the rear of the vehicle is clear.
2. Turn the 'Body selector' switch to select either the left-hand or right-hand body.

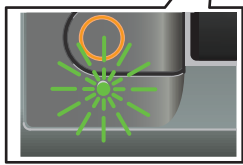


2243-OT1-D-GB-G2



2244-OT1-D-GB-G2

3. Switch the ignition on, then start and run the engine.
 - The cab control panel will initialise and then display the 'Body system off' mode.



3885-OT1-D-GB-G2

4. Turn the 'Body main' switch on.

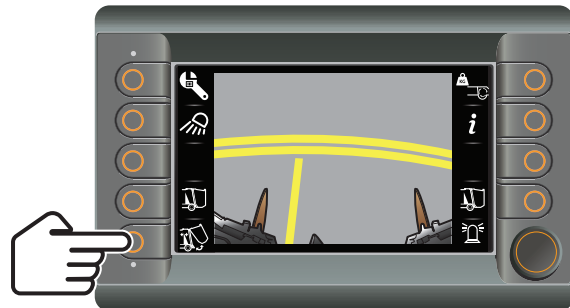


- The screen will display the 'Body system run' mode.



2248-OT1-D-GB-G6

5. Press and release the internal discharge switch.



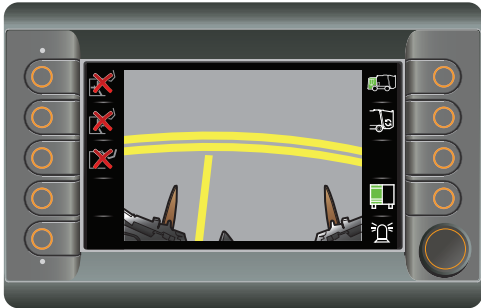
2354-OT1-D-GB-G4

- The screen will display the 'Body discharge internal controls' mode.



OPERATING THE MACHINE

6. Press and release the external discharge switch.



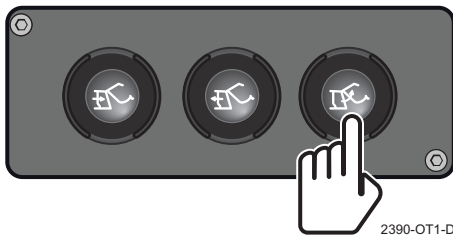
2373-OT1-D-GB-G3

- The screen will display the 'Body discharge external controls' mode.

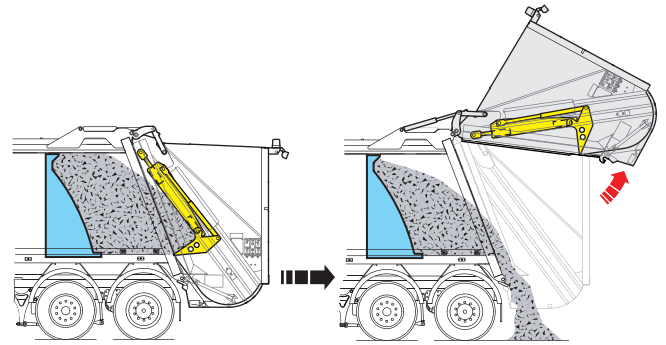


WARNING:
MAKE SURE THAT YOU KNOW THE HEIGHT OF YOUR VEHICLE WITH THE TAILGATE AND WASTE CONTAINER LIFTING DEVICE, IF FITTED, RAISED.

7. Press the 'Tailgate raise' push-button on the external discharge control panel until the tailgate is fully raised and then release the push-button.

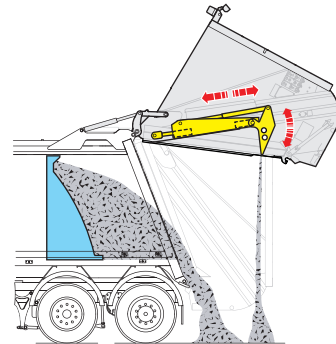


2390-OT1-D-GB-G1



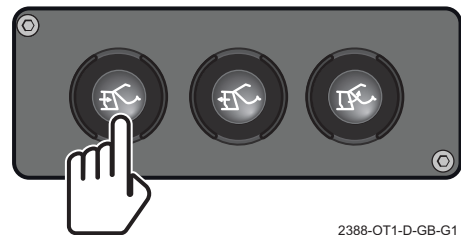
1985-01-OT1-GB-G1

- If the 'Tailgate clear' cycle function has not been switched off, the compaction mechanism will perform one packing cycle to clear refuse from the tailgate.

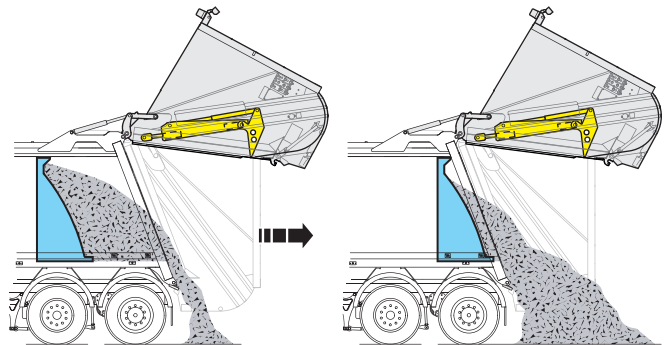


2377-OT1-D-GB-G2

8. Press the 'Ejector plate eject' push-button on the external discharge control panel to discharge contents of body and then release the push-button.



2388-OT1-D-GB-G1

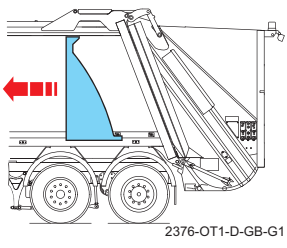
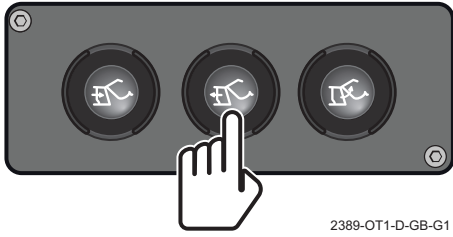


1984-01-OT1-GB-G1

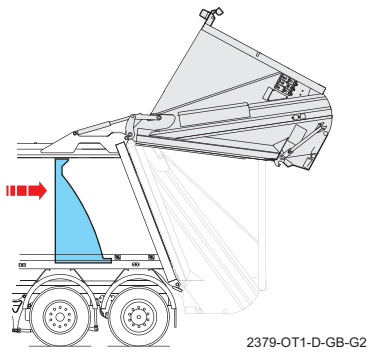
Leave barrier at rear of body ready for next collection.



9. If travelling a long distance, press the 'Ejector plate retract' push-button on the external discharge control panel to position the ejector plate at the front of the body.



Move the ejector plate to the rear of the body at the first collection point.



Note: The tailgate must be raised until it is 'Out-of-locks' before the ejector plate can be moved.



WARNINGS:
MAKE SURE THAT THE TAILGATE AREA IS CLEAR OF PERSONNEL.

MAKE SURE THAT YOU KNOW THE HEIGHT OF YOUR VEHICLE WITH THE TAILGATE AND WASTE CONTAINER LIFTING DEVICE, IF FITTED, RAISED.

10. Move vehicle to a safe area.



WARNINGS:
MAKE SURE THAT THE TAILGATE AREA AND BODY/TAILGATE SEAL IS CLEAR OF DEBRIS BEFORE LOWERING THE TAILGATE.

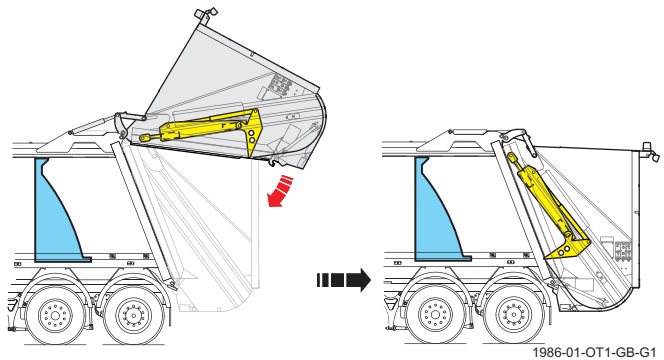
ALWAYS INSERT THE TAILGATE PROPS TO SUPPORT THE TAILGATE IF CLEANING REQUIRES YOU TO WORK BENEATH IT.

THE TAILGATE SEAL SHOULD BE KEPT IN GOOD CONDITION AND REPLACED IF DAMAGED.

11. Press the two push-buttons on the 'Tailgate lowering' control panel simultaneously to lower the tailgate fully into its locks.



2387-OT1-D-GB-G1



- The engine speed will lower to tick-over.
- When the tailgate is lowered fully and engaged in its locks, the tailgate raised pictogram will stop displaying on the control panel screen.



5.5 Tailgate out of locks/ autobrake interlock (option)

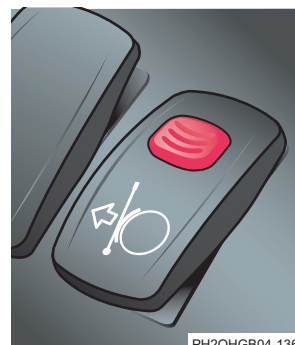
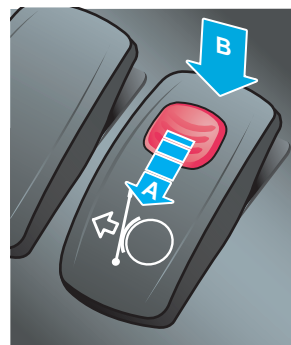
The optional Tailgate out-of-locks/autobrake interlock ensures that the parking brake is applied if the tailgate is out of its locks when the vehicle is stationary (vehicle speed below 1.5 km/h, neutral selected). The interlock will not engage the parking brake if the vehicle is travelling at more than 1.5 km/h.

In the event of the operative raising the tailgate without having first applied the parking brake, an electronically controlled circuit will automatically apply the parking brakes immediately the tailgate rises out of its locks.

At the same time the control circuit will cause the 'Tailgate out-of-locks/autobrake interlock' pictogram to display on the cab control panel screen.



5.6 Overriding the tailgate out of locks/autobrake interlock



In the event of an emergency, the 'Tailgate out-of-locks/autobrake interlock override' switch can be operated to release the parking brake after the Tailgate out-of-locks/autobrake Interlock has engaged it, as follows:



WARNING:
MAKE SURE THAT YOU KNOW THE HEIGHT OF YOUR VEHICLE WITH THE TAILGATE AND WASTE CONTAINER LIFTING DEVICE, IF FITTED, RAISED.

1. Apply the footbrake.
2. Select drive.
3. Press the safety catch on the 'Tailgate out-of-locks/autobrake interlock override' switch into the switch (A).
4. Press the front of the 'Tailgate out-of-locks/autobrake interlock override' switch downwards (B).
5. The parking brake will release.

At the same time the 'Tailgate out-of-locks/autobrake interlock override' switch operated' pictogram will display on the cab control panel screen.



6. Stop the vehicle, apply the parking brake, lower the tailgate into its locks and reset the 'Tailgate out-of-locks/autobrake interlock override' switch as soon as possible.



5.7 Propping/unpropping the tailgate



WARNING:
DO NOT WALK UNDER RAISED TAILGATE UNLESS IT IS SUPPORTED BY ITS PROP(S).

5.7.1 To prop the tailgate

Note: A tailgate prop is provided for each tailgate. Each tailgate prop is designed to take the weight of a full tailgate load including the waste container lifting device (if fitted).

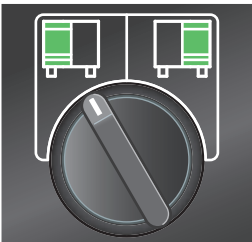
One prop, correctly positioned, will be sufficient to hold the tailgate.

1. Stand the vehicle on clean, level and stable ground.
2. Engage the parking brakes.
3. Select Neutral 'N'.

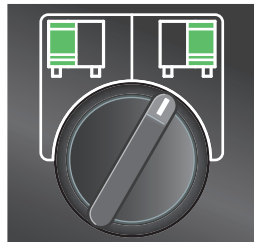


WARNING:
MAKE SURE THAT YOU KNOW THE HEIGHT OF YOUR VEHICLE WITH THE TAILGATE AND WASTE CONTAINER WASTE CONTAINER LIFTING DEVICE, IF FITTED, RAISED.

4. Turn the 'Body selector' switch to select either the left-hand or right-hand body.

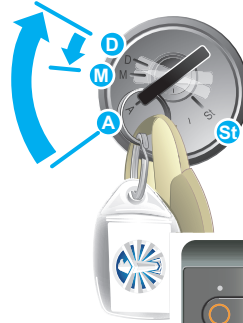


2243-OT1-D-GB-G2



2244-OT1-D-GB-G2

5. Switch the ignition on, then start and run the engine.
 - The cab control panel will initialise and then display the 'Body system off' mode.



3885-OT1-D-GB-G2



OPERATING THE MACHINE

6. Turn the 'Body main' switch on.



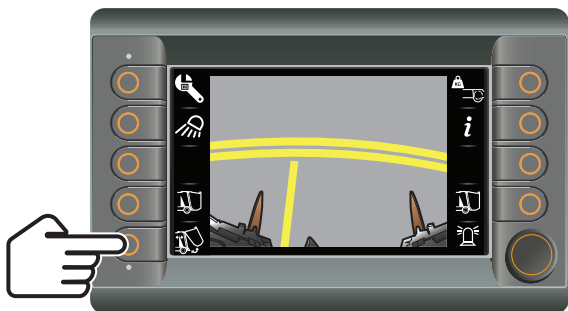
- The screen will display the 'Body system run' mode.



2248-OT1-D-GB-G6

7. Press and release the internal discharge switch.

- The screen will display the 'Body discharge internal controls' mode.

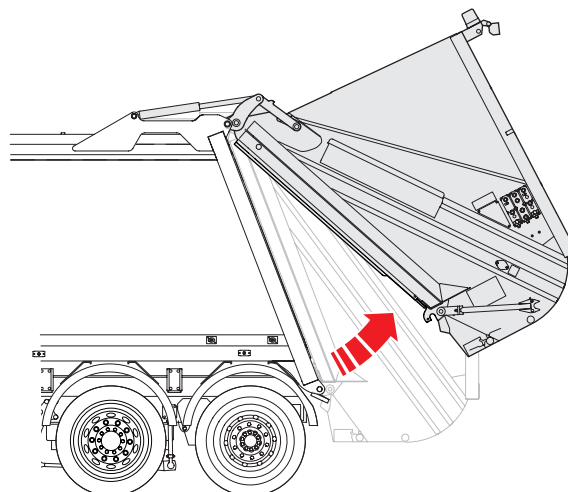
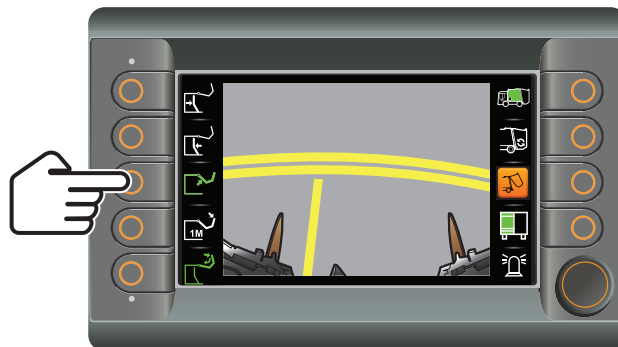


2354-OT1-D-GB-G4



WARNING:
MAKE SURE THAT YOU KNOW THE HEIGHT OF YOUR VEHICLE WITH THE TAILGATE AND WASTE CONTAINER LIFTING DEVICE, IF FITTED, RAISED.

8. Press and hold tailgate raise switch until the tailgate is approximately 1 metre from the body and then release the button.



2493-OT1-D-GB-G5

As the tailgate raises:

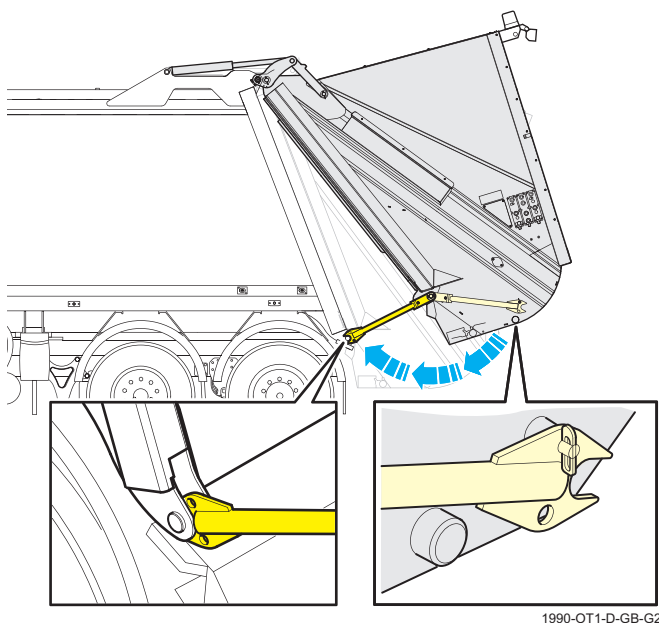
- The 'Tailgate out-of-locks' pictogram will display on the control panel screen.



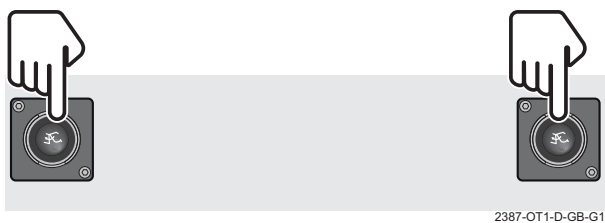


OPERATING THE MACHINE

- Release the prop from tailgate by turning the anti-loose clip and swing the prop into position using the slotted eye feature at the tailgate end of the prop to engage the prop securely on the landing pad bracket at the rear of the body.



- Press the two push-buttons on the 'Tailgate lower' control panel simultaneously to lower the tailgate until the prop is fully closed taking the full weight of the tailgate.



- When the tailgate is propped, the 'Tailgate out-of-locks' pictogram will display on the control panel screen.



- Stop the engine.



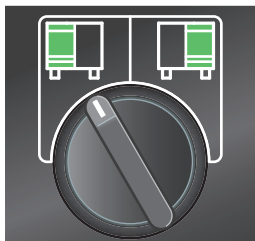
5.7.2 To unprop the tailgate

1. Engage the parking brakes.
2. Select Neutral 'N'.

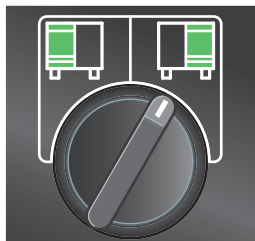


WARNING:
MAKE SURE THAT YOU KNOW THE HEIGHT OF YOUR VEHICLE WITH THE TAILGATE AND WASTE CONTAINER LIFTING DEVICE IF FITTED, RAISED.

3. Turn the 'Body selector' switch to select either the left-hand or right-hand body.

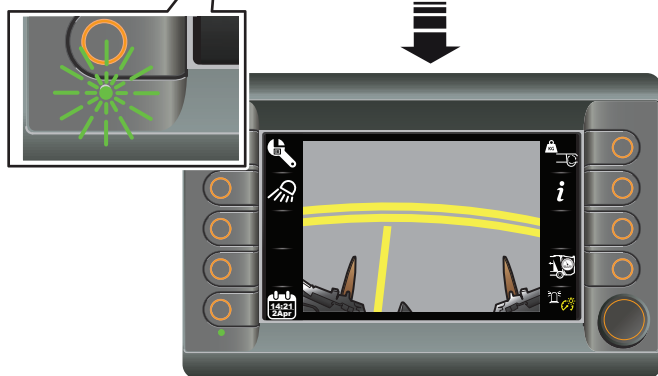
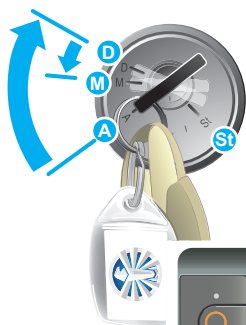


2243-OT1-D-GB-G2



2244-OT1-D-GB-G2

4. Switch the ignition on, then start and run the engine.
 - The cab control panel will initialise and then display the 'Body system off' mode.



3885-OT1-D-GB-G2

5. Turn the 'Body main' switch on.



- The screen will display the 'Body system run' mode.



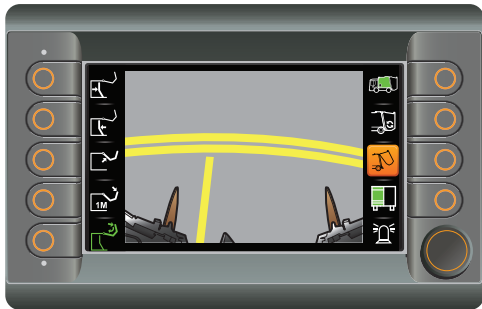
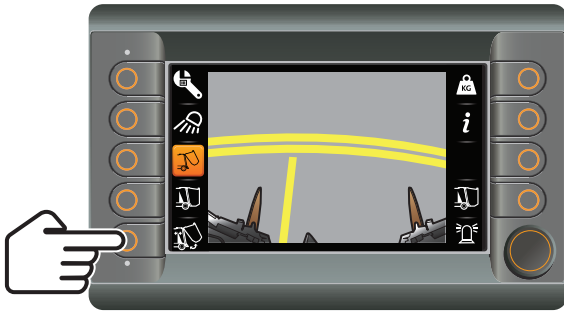
2399-OT1-D-GB-G3

6. Check that the 'Tailgate out-of-locks' pictogram displays on the screen.





7. Press and release the internal discharge switch.
- The screen will display the 'Body discharge internal controls' mode.

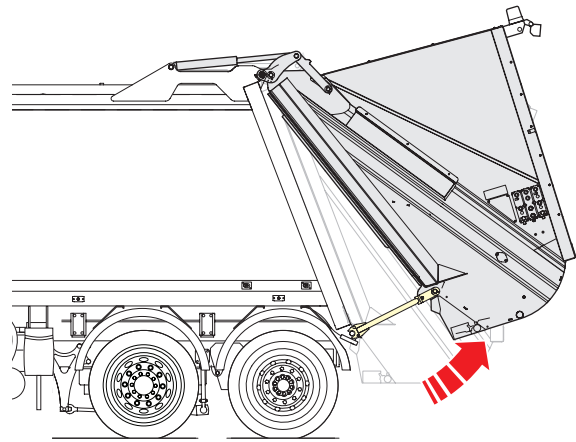
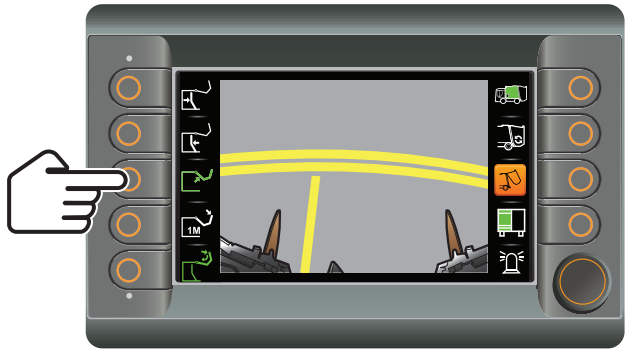


2380-OT1-D-GB-G3



WARNING:
MAKE SURE THAT YOU KNOW THE HEIGHT
OF YOUR VEHICLE WITH THE TAILGATE
AND WASTE CONTAINER LIFTING DEVICE,
IF FITTED, RAISED.

8. Press and hold the tailgate raise switch to raise the tailgate approximately 100 mm to take the weight off the prop and then release the button.



2480-OT1-D-GB-G4

As the tailgate raises:

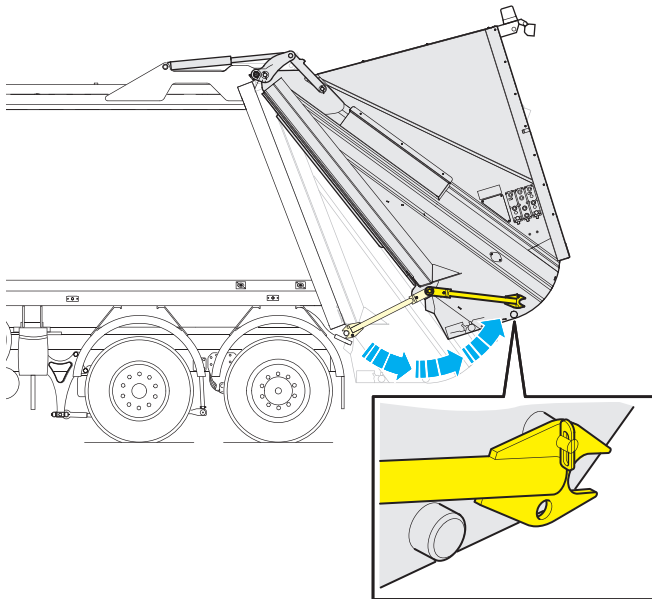
- The 'Tailgate out-of-locks' pictogram will continue to display on the control panel screen.





OPERATING THE MACHINE

- Disengage the prop from the tailgate lower pin, swing the prop into the stow position on the tailgate and secure with the retaining clip.



2382-OT1-D-GB-G2

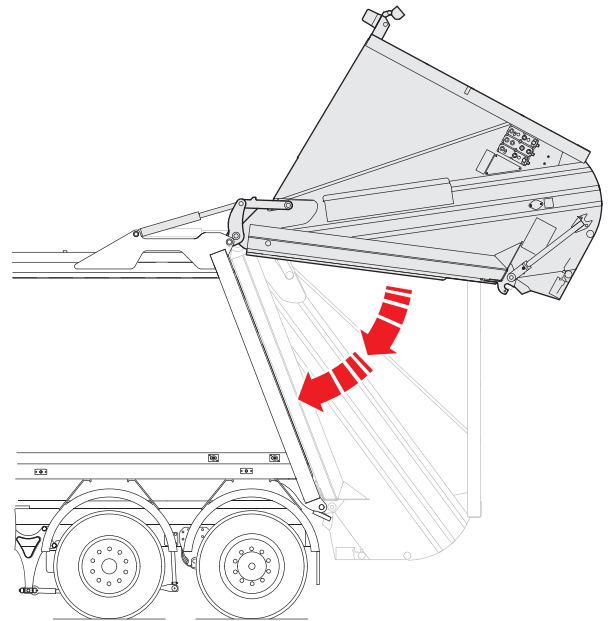
- Press the two push-buttons on the 'Tailgate lowering' control panel simultaneously to lower the tailgate fully into its locks.

- Check that the tailgate lowers and engages both locks evenly.



2387-OT1-D-GB-G1

5



2599-OT1-D-GB-G2

- The engine speed will lower to tick-over.
- Check that the tailgate is sitting square on the body.



5.8 System warnings

5.8.1 Hydraulic oil temperature warning

The hydraulic system is fitted with a temperature-sensing switch, which will display the 'Hydraulic oil hot' warning pictogram on the cab panel screen if the hydraulic oil is too hot.



This may occur when the vehicle is full and still packing or if there is an hydraulic system fault. If the 'Hydraulic oil hot' warning pictogram displays, take the following action:

5.8.2 Body full - collection complete

1. Turn the 'Body main' switch to off, or press any 'Emergency stop' push-button.
 - Operating any 'Emergency stop' push-button will cause the 'Emergency stop' buzzer in the cab control panel to sound.
2. Proceed to discharge site and discharge the refuse from the body.

5.8.3 Body not full - compaction mechanism jammed



WARNING:
BEFORE CLEARING A JAM, THE OPERATIVE MUST:

1. Turn the 'Body main' switch to off and remove the key.
2. Stop the engine and remove the ignition key.
3. Lock the cab door and remove the key.
4. Keep the 'Body main' switch key, the ignition key and the cab door key in your possession until the jam is cleared.
5. Clear the jam.
6. Restart the vehicle and operate the compaction system to run normally.
7. The warning light should extinguish after 2-3 minutes.
8. Start collection again.

5.8.4 Recurring fault

If a fault occurs which causes the temperature to continue to rise and the 'Hydraulic oil hot' warning pictogram continues to be displayed, a second switch will automatically shut down the compaction mechanism.

At the same time the 'Hydraulic oil over temperature cut out' warning pictogram will be displayed.



To restart the mechanism:

1. Turn the 'Body main' switch to off.
2. Wait until the 'Hydraulic oil over temperature cut out' warning pictogram has extinguished (the time is dependent on the temperature of the ambient air).
3. Restart the mechanism again.
4. If the compaction mechanism shuts down a second time due to a temperature rise, refer the incident/machine to supervision for attention.

5.9 Breakdown

5.9.1 Refuse collection bodywork breakdown

In the event of a refuse collection bodywork operating system failure, preventing the operation of the compaction mechanism or body discharge the refuse collection vehicle should be driven/recovered to a suitably equipped repair workshop and repaired.

5.9.2 Chassis-cab breakdown

Consult the appropriate sections of the chassis-cab operator's handbook for information about how to recover the refuse collection following a breakdown of the chassis-cab.



Olympus Twin Pack Operator's Handbook

CONTENTS		PAGE
6	Options.....	6-3
6.1	One Pass vehicles.....	6-3



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6 Options

6.1 One Pass vehicles



3991-OT1-D-GB-G1

The 'One Pass' version has an additional body mounted on the chassis between the cab and the front of the Olympus Twin Pack refuse collection body. The body comprises one or more compartments for collection of recyclable waste which is not compacted.

This recyclable waste is loaded into a hopper on the pavement side of the vehicle. The hopper is raised to load the waste into the body compartments.



3996-OT1-D-GB-G1

The waste is discharged through individual doors on the opposite side of the vehicle to the hopper.



3997-OT1-D-GB-G1

Operator's controls are located adjacent to the hopper and inside the cab.



3998-OT1-D-GB-G1

Refer to the separate manufacturer's Operator's Instructions for operation of the additional body and its controls.



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Olympus Twin Pack Operator's Handbook

CONTENTS	PAGE
7 Supplementary information	7-2



SUPPLEMENTARY INFORMATION

7 Supplementary information

Supplementary information/owners comments

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A

- About this Operator's Handbook — **iii**
- Aftermarket support — **iv**
- Audible warning devices — **4-8**
- Automatic loading cycle — **5-9**

B

- Body — **3-3**
- Body identification label — **iv**
- Body system run controls — **4-38**
- Breakdown — **5-28**
 - Chassis-cab breakdown — **5-28**
 - Refuse collection bodywork breakdown — **5-28**

C

- Cab control panel — **4-9**
 - Body discharge - Cab control panel — **4-14**
 - Body discharge - External discharge control panel (option) — **4-14**
 - Body system controls — **4-12**
 - Body discharge - Cab control panel — **4-12**
 - Body discharge - External discharge control panel (option) — **4-12**
 - Body system off — **4-12**
 - Body system run — **4-12**
 - Body system off — **4-13**
 - Body system run — **4-13**
 - Switching cab control panel on — **4-10**
 - Screen brightness — **4-11**
- Cab control station — **4-4**
 - Body discharge selector switch — **4-6**
 - Body main switch — **4-6**
 - Tailgate out of locks/autobrake interlock override switch (option) — **4-7**
 - Warning beacon switch (if fitted) — **4-7**
- Calendar and clock — **4-18**
 - Adjusting the calendar and clock — **4-18**
- CE certification — **1-6**
- Compaction mechanism — **3-3**

- Compaction mechanism control station — **4-45**
 - Left-hand drive vehicles — **4-45**
 - Multi-cycle start switch — **4-46**
 - Rescue push-button (yellow) — **4-47**
 - Right-hand drive vehicles — **4-45**
 - Signal push-button (black) — **4-47**
 - Start pack cycle push-button (green) — **4-48**

- Compaction mechanism multi-cycle adjustment — **4-26**

- Compaction rate adjustment — **4-30**

D

- Discharge controls — **4-37**
- Discharging operation — **3-5**
- Discharging refuse — **5-14**
 - Discharging refuse using external controls — **5-18**

E

- Eject — **4-42**
- Emergency stop — **5-10**
- Emergency stop push-buttons — **4-52**
 - Resetting an emergency stop push-button — **4-52**
- External discharge control panel (option) — **4-40**
- External discharge controls — **4-39**

G

- Green switch — **4-35**

H

- How it works — **3-3**
- Hydraulic system — **3-6**
 - Hydraulic cylinders — **3-6**
 - Hydraulic pump — **3-6**
 - Hydraulic tank and valve modules — **3-6**

I

- In-Cab discharge controls — **4-39**



L

- Loading refuse — **5-4**
 - Loading the hopper — **5-4**
- Location of major features — **1-4**
- Lower tailgate to 1 metre — **4-43**

N

- Neutral interlocks — **4-8**

O

- Olympus Twin Pack body sizes — **1-3**
- Olympus Twin Pack configurations — **1-2**
- Olympus Twin Pack refuse collection body — **1-2**
- One Pass vehicles — **1-6**
- Operating cycle — **3-4**
- Operating the controls — **5-5**
 - Automatic loading cycle — **5-9**
 - Energising the control panels — **5-5**
 - Introduction — **5-5**
 - Manual loading cycle — **5-8**
 - Operating the compaction mechanism controls — **5-7**
 - Operation using packing sequence controls — **5-13**
 - Short stroke cycle operation — **5-12**
- Operating the machine — **5-3**
- Operational safety — **5-3**
 - Body selection — **5-3**
 - Carriage plate moving down — **5-3**
 - Carriage plate moving up — **5-3**
 - Packer plate closing — **5-3**
 - Packer plate opening — **5-3**
- Operator's controls — **4-3**
 - Control location — **4-3**
- Options — **6-3**
 - One Pass vehicles — **6-3**
- Overriding the tailgate out of locks/autobrake interlock — **5-21**
- Owner's information — **v**

P

- Packing sequence control panel (option) — **4-50**
 - Carriage plate down — **4-50**
 - Carriage plate up — **4-50**
 - Close packer plate — **4-51**
 - Open packer plate — **4-51**
- Propping/unpropping the tailgate — **5-22**
 - To prop the tailgate — **5-22**
 - To unprop the tailgate — **5-25**

R

- Refuse collection vehicle — **1-2**
- Rescue — **5-10**
- Retract — **4-43**



S

- Safety precautions — **2-3**
 - At discharge site — **2-9**
 - Before leaving discharge site — **2-9**
 - Before leaving the depot — **2-6**
 - Collecting refuse — **2-7**
 - General — **2-5**
 - Introduction — **2-3**
 - Personal hygiene — **2-4**
 - Protective clothing — **2-5**
 - Safety symbol, warnings, cautions and notes — **2-4**
 - Trained personnel — **2-4**
 - Travelling to collection point — **2-7**
 - Travelling to discharge site — **2-8**
 - Use of refuse collection vehicle — **2-3**
 - Use of these instructions — **2-4**
 - Warning labels — **2-10**
 - Supplementary information — **7-2**
 - Switches — **4-18**
 - Body system run controls — **4-38**
 - Body weight — **4-24**
 - Body weight and multi-cycle — **4-25**
 - Body weight only — **4-24**
 - To leave the body weight screen: — **4-25**
 - Compaction mechanism multi-cycle adjustment — **4-26**
 - To change the number of compaction cycles for the left-hand body: — **4-27**
 - To change the number of compaction cycles for the right-hand body: — **4-28**
 - To leave the Compaction mechanism multi-cycle adjustment screen: — **4-29**
 - To leave the Compaction rate adjustment screen: — **4-33**
 - Compaction rate adjustment — **4-30**
 - To adjust the compaction rate for the left-hand body: — **4-31**
 - To adjust the compaction rate for the right-hand body: — **4-32**
 - Waste type — **4-30**
 - Discharge controls — **4-37**
 - Eject — **4-42**
 - External discharge control panel (option) — **4-40**
 - External discharge controls — **4-39**
 - Green switch — **4-35**
 - Information — **4-22**
 - To leave the Information screen: — **4-23**
 - Lower tailgate to 1 metre — **4-43**
 - Maintenance — **4-20**
 - To leave the Maintenance screen menu: — **4-21**
 - Retract — **4-43**
 - System off — **4-36**
 - System run — **4-36**
 - Tailgate clear cycle — **4-42**
 - Tailgate clear selection — **4-35**
 - Tailgate lowering control panel — **4-44**
 - Tailgate raise — **4-41**
 - Vehicles fitted with 'Tailgate out-of-locks/autobrake function' — **4-41**
 - Work light switch — **4-34**
- System off — **4-36**
 - System run — **4-36**
 - System warnings — **5-28**
 - Body full - collection complete — **5-28**
 - Body not full - compaction mechanism jammed — **5-28**
 - Hydraulic oil temperature warning — **5-28**
 - Recurring fault — **5-28**

T

- Tailgate — **3-3**
- Tailgate clear cycle — **4-42**
- Tailgate clear selection — **4-35**
- Tailgate lowering control panel — **4-44**
- Tailgate out of locks/autobrake interlock (option) — **5-21**
- Tailgate raise — **4-41**

W

- Warning labels — **2-10**
- Warning pictograms — **4-15**
- Waste container lifting device options — **1-6**
- Waste container lifting devices — **1-6**
- Work light switch — **4-34**



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