



Product Brochure

FORCE Series II Front Loader

Bucher Municipal a strong partner at your side

Bucher Municipal is a world-leading manufacturer of municipal vehicles for street cleaning, waste collection and snow removal in public and private areas. Bucher Municipal stands for high-quality products and service excellence, as well as innovation, competency, reliability and sustainability. Our vehicles incorporate technically advanced solutions focusing on high performance, ease of use, low maintenance and cost-effective operation.

Bucher Municipal takes its responsibility towards society and the environment seriously. Our mission is to ensure that roads and private or public spaces are kept clean and safe. Bucher Municipal implements this mission by focusing on functional engineering, environmental integrity and driving comfort. Bucher Municipal has a worldwide sales and service network to ensure that it can offer service excellence close to its customers.



About Us

Company Overview

Bucher Municipal is one of the five core divisions of the global industrial group Bucher Industries, and is today recognised as the leading provider of equipment to the Australian Waste Industry.

Bucher Municipal boasts an impressive product range including Side, Rear and Front loading refuse machines as well as Compact and Truck Mounted Road Sweepers, static and transportable compactors and vacuum tankers.

Every Bucher Municipal machine is application engineered, manufactured in Victoria and supported by a passionate after sales support team that operates 24/7, 365 days a year.

Engineering

Bucher Municipal boasts a large, Australian based, Engineering Department consisting of multi-skilled team members across both Research & Development and Applications Engineering with over 100 years of combined service with the company.

The multi-discipline engineering team has all fields covered including mechanical, electrical, hydraulic, systems and applications engineering.

The team also includes dedicated technicians within the R&D workshop for prototype builds and development.

Manufacturing

Bucher Municipal's manufacturing ability is world class within the Australian Waste Industry boasting features such as:

- Two Australian manufacturing facilities; Clayton & Scoresby in Victoria.
- Ability to produce refuse product inside 5 days of chassis delivery at maximum throughput.
- State of the art 'ARDEN' paint booth featuring:
 - >> Climate controlled
 - >> Dustless paint process
 - >> Automotive standard of finish
 - >> OH&S initiatives such as Wall-Man ladder units
- Flowing production lines, including line side inventory and tooling. Specific processes, parts and tools are located and performed at each station, improving labour efficiency and throughput.
- All fabricated components, such as refuse bodies are supported with 3D computer design models including corresponding jigs and fixtures to provide consistent quality and performance of products.
- All designs are Finite Element (FEA) tested to ensure each machine is robust enough to stand the test of time while providing industry leading payloads for our customers.
- Independent quality processes and auditing provide quality assurance and traceability.

After Sales Support

Bucher Municipal provides national after sales support, which is unsurpassed within the industry.

With their national branch network covering spare parts, service, warehousing and distribution, and their extensive fleet of service vehicles, Bucher Municipal can address all service requirements on location Australia wide.

- Five State of the Art Retail Facilities located in Adelaide, Brisbane, Perth, Sydney and Melbourne
- 24/7 Field Service Support
- 9,000 Lines of Parts with Inventory located in every State
- 27 Service Vehicles
- Factory Trained Technicians
- Repair & Maintenance Packages

FORCE Refuse Front Loader Stronger, More Efficient & Reliable



Since its release in 2011, the Bucher Municipal FORCE Front Loader has led the market in Front Loading Refuse collection equipment.

Over the years we have been listening to our customers and working towards addressing the major issues experienced in the Front Loader refuse industry.

FORCE, which stands for Front Operating Refuse Collection Equipment, has now evolved. With its many improvements, and numerous industry first innovations, the iconic Front Loader will now exceed customer's expectations in the areas of Durability, Productivity, Safety and Reliability.

Bucher Municipal is proud to introduce the FORCE Series II Front Loader.

Available in 2 sizes, 28.5m³ and 33.5m³ body capacities, the FRONT Loader is ideal for any commercial application on either 6x4 or 8x4 chassis.

Fast Facts

- Application Engineered, FORCE Series II is available in a 28.5m³ body capacity for 6x4 and 33.5m³ body capacity for 8x4 chassis applications
- 2500kg lift capacity, 12 second lift cycle time and pack on the run capability results in a drivers ability to pick up more bins per shift
- Scissor-type design compaction system enables a higher compaction force and greater payloads
- Reinforced Eject Blade and Hopper Frame provides strong and reliable compaction and a longer working life
- A three lid hopper system improves shielding to minimise wind-blown rubbish, reducing the overall environmental impact of the vehicle
- For increased driver safety, the in-cab warning system covers: Arms raised, hopper lid open, tailgate open, flipping roof raised
- A wide range of add-on options are available to ensure the FORCE Front Loader always meets both the job and customer expectations
- Improved safety access to the front of body and roof with new design access ladders



Technical specifications

General Data	FORCE 285	FORCE 335
Body capacity	28.5m³	33.5m³
Hopper capacity	8.5m³	8.5m³
Cab chassis configuration	6x4 - 22,500kg GVM	8x4 - 27,500kg GVM
Wheelbase (Approx)	4,800mm	5,840mm
Body length	9,504mm	10,704mm
Body height (Excluding Chassis)	2,550mm	2,550mm
Body width	2,495mm	2,495mm
Body weight	6,700kg	7,400kg
Tailgate opening angle	115 degrees	
Performance		
Payload*	Approx 9,000kg	Approx 11,000kg
Bin lifting capacity	2,500kg (Optional 3,600kg)	
Bin suitability	1.0m³ - 6.0m³ front loader bins & full range of MGB's**	
Compaction force	38,750kg	
Bin lift cycle time	12 seconds	
Half pack cycle time	20 seconds	
Full blade eject cycle time	42 Seconds	66 Seconds
Material Listing		
Body side sheets	3.2mm Wear Resistant Steel (1400MPa UTS) ⁺	4mm Wear Resistant Steel* (1400MPa UTS)
Body roof sheet	4mm Wear Resistant Steel (1400MPa UTS) ⁺	
Body floor sheet	5mm Wear Resistant Steel (1400MPa UTS) ⁺	
Tailgate sheets	4mm Wear Resistant Steel (1400MPa UTS) ⁺	
Hopper lids	3.2mm Wear Resistant Steel (1400MPa UTS) ⁺	
Ejector blade	4mm Wear Resistant Steel (1400MPa UTS) ⁺	
Lift arms	6mm High Strength Steel (950MPa UTS) ⁺⁺	
Fork blades	20mm Wear Resistant Steel (1400MPa UTS) ⁺	
Ejector blade/wear pads	Replaceable Oil Filled Nylon Wear Pads	

*Subject to loading conditions, waste type, fitted options and cab chassis selection

**MGB lifter option required

⁺Hardox 450 or equivalent material subject to availability

⁺⁺Domex 700 or equivalent material subject to availability

Controls & Hydraulics	
Control system	Bucher Municipal CANBus control system
Operator interface	Proportional multi function joystick with LCD screen & push button controls
Hydraulic pump	120-130L/min Variable displacement load sensing pump
Maximum system pressure	260 Bar
Hydraulic valving	Proportional hydraulic control valves
Hydraulic piping	Zinc plated steel piping
Hydraulic filters	10 Micron filters
Hydraulic oil tank	250 Litres

Productivity specifications

Model		FORCE 285	FORCE 335
Body Size		28.5m ³	33.5m ³
Cab chassis configuration		6x4	8x4
Hopper volume		8.5m ³	
Number of bins in hopper before packing	1.5m ³ bins	5 bins	
	3.0m ³ bins	2 bins	
Effective body volume		20m ³	25m ³
Average Payload ^{*1}		Approx. 9,000kg	Approx. 11,000kg
Maximum compaction force		380KN	380KN
Compaction density ^{*2}		180 - 450kg/m ³ - Adjustable	
Maximum bin loading rate ^{*3}		3 bins/minute = 180 bins/hour	
Bin lifter times ^{*4}	Total cycle time	11 - 12 seconds	
	Lift arms - raise	4 - 5 seconds	
	Lift arms - lower	3.5 - 4.5 seconds	
	Forks - raise	3 - 4 seconds	
	Forks - lower	3 - 4 seconds	
	Sliding forks - in	4 - 5 seconds	
	Sliding forks - out	6 - 7 seconds	
Body function times ^{*4}	Hopper lids - open	1.5 - 2 seconds	
	Hopper lids - close	3.5 - 4 seconds	
	Tailgate - open (including lock)	20 - 25 seconds	
	Tailgate - close (including lock)	20 - 25 seconds	
	Eject Blade - Extend	30 - 34 seconds	44 - 48 seconds
	Eject Blade - Retract	12 - 16 seconds	22 - 26 seconds
	Half-Pack cycle time	20 seconds	20 seconds
	Full-Pack cycle time	42 Seconds	66 Seconds
	Flipping roof - raise	2 - 3 seconds	
	Flipping roof - lower	4 - 5 seconds	
Suitable bin sizes	1m ³ - 6m ³ front loader bins	Yes	
	80L - 360L MGB	Yes ^{*5}	
	660L - 1,100L MGB	Yes ^{*5}	

KEY:

*1 - Indicative values only. Subject to loading conditions, waste type and cab chassis selection.

*2 - Indicative values only. Subject to loading conditions and waste type.

*3 - Assumes 3 bins are emptied into hopper before packing load.

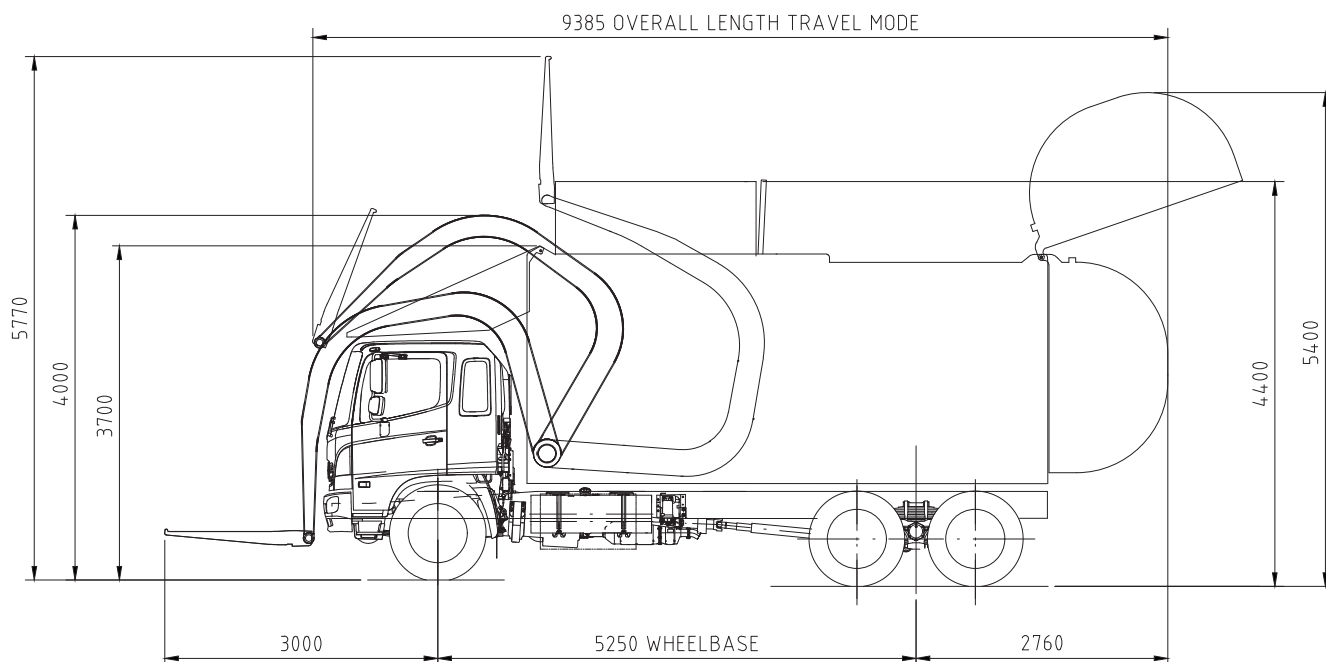
*4 - Indicative values only at 950rpm. Subject to loading conditions and cab chassis selection.

*5 - MGB bin lifter option required.

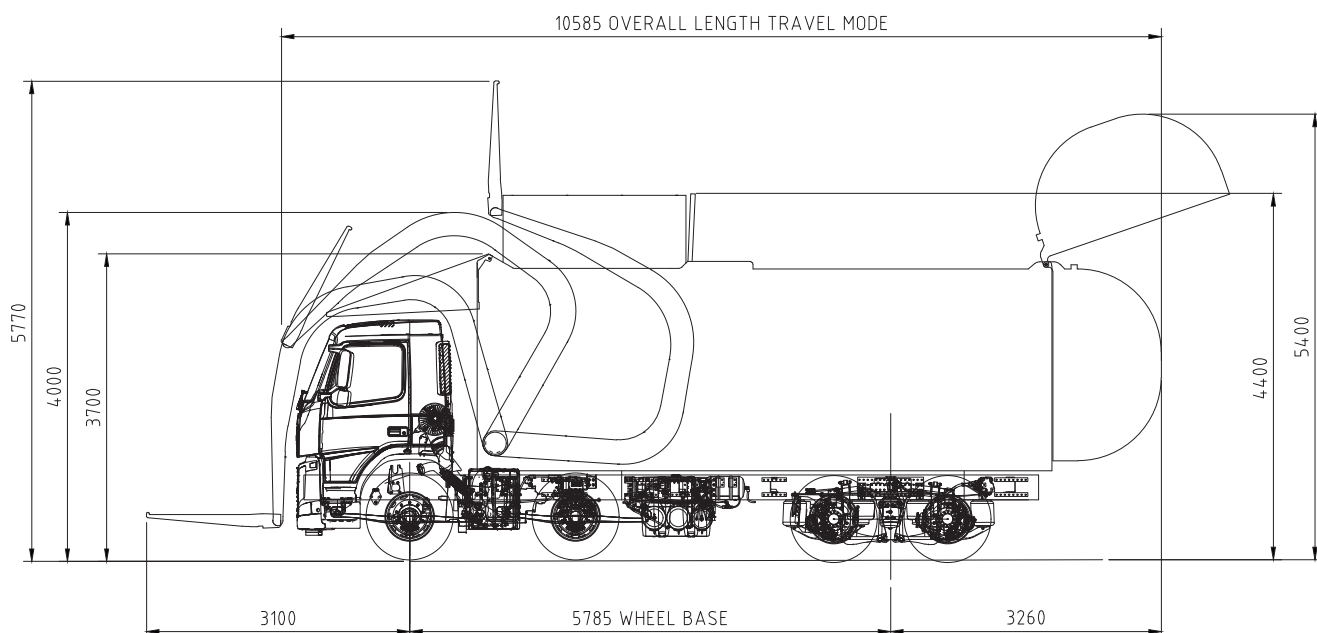
NOTE: Bucher Municipal exercises a program of continual product development, and in this context reserve the right to amend specifications without prior notice.

Overall Dimensions

FORCE 285, 28.5m³



FORCE 335, 33.5m³



Please Note:

Layouts shown are for optimal wheelbase and axle configurations only and not specific to chassis make and model.

Dimensions are subject to chassis, wheelbase and option selection.

Refer NHVR or local state regulations for Rear Overhang allowances.

Bucher Municipal • 65-73 Nantilla Rd, Clayton North, Vic. 3168 AUS

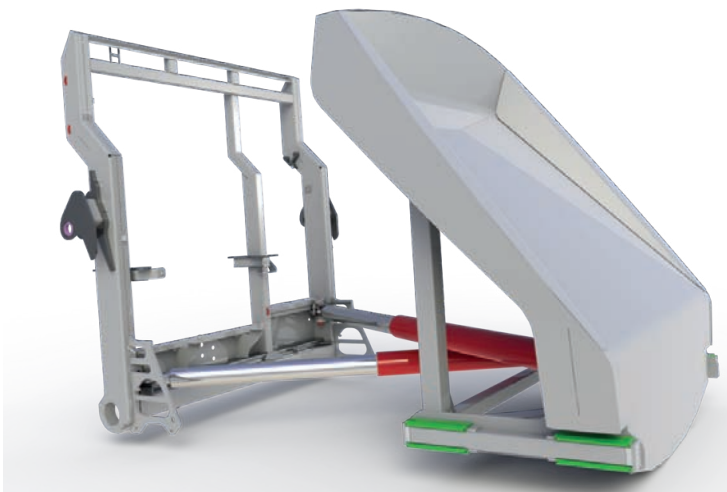
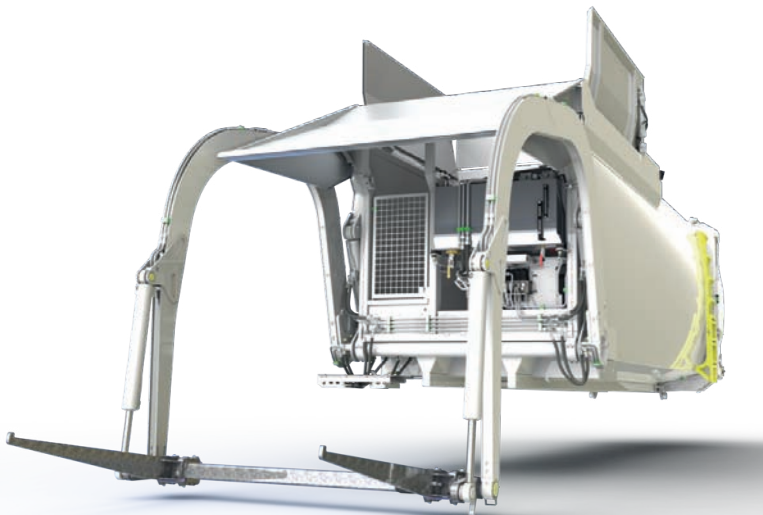
Phone +61 3 9271 6400 • Fax +61 3 9271 6480

info@buchermunicipal.com.au • www.buchermunicipal.com.au

Due to continuous development Bucher Municipal reserves the right to alter specifications without prior notice.

Standard Features

Safety	Body	Lighting
Full O&S compliance	Smooth body design with single side sheets	LED upper and lower tail lights with guards
Emergency stops to disable all functions	3 lid hopper design	Rear mounted amber flashing beacon light with guard
In cab warning system	Twin ejector blade cylinders	LED tailgate side warning lights
Safety interlocks at body access points	Floor mounted sump with muck out doors on both sides	Two tailgate mounted reverse work lights
Dual self-aligning tailgate props	Water tight tailgate seal	Two side body work lights
Hydraulic cylinder burst valves	High front spill panel	Reverse lamp and alarm
Fork angle safety interlock	Hardox ejector blade runners	Body mounted side-marker LEDs
Vehicle speed limited when over height	Replaceable ejector blade wear pads	Hopper & eject blade work lights
Electrical & Hydraulic Control	Standard Accessories	Standard Accessories cont...
Bucher Municipal CANBus control system with diagnostic interface	Hopper access ladder, platform & mesh door with safety interlock	Sump doors with spill trays
Pack on the run functionality	Plastic mudguards	Interchangeable, bolt on arms & forks
Ability to lift and manoeuvre bins during entire packing cycle	Bucher Municipal mudflaps	Anti-slip & safety rails on body roof
Hopper lid safety controls	Hydraulic tank ball valves	Statutory/safety signage
Hose burst and counter balance valves	Aluminium flipping roof	Technical manual
High capacity load sensing piston pump	Eject blade mounted shovel holder	Warranty – 1 year/2,500 hour
Proportional control valves	Premium single colour 2 pack paint	First service labour cost
Hydraulic filtration on pressure and return lines		



Standard Features and Accessories



Safety

Full OH&S compliance.
Emergency stops to disable all functions.
In cab warning systems.
Safety interlocks at body access points.
Dual self-aligning tailgate props.
Hydraulic cylinder burst valves.
Fork angle safety interlock.
Vehicle speed limited when over height.



Body

Smooth body design with single side sheets.
Floor mounted sump with muck out doors and spill trays on both sides.
Water tight tailgate seal.
High front spill panel.
Wear resistant steel ejector blade runners.
Replaceable ejector blade wear pads.



Hopper & Eject Blade

3 lid hopper design.
Profiled lid design for improved strength.
Hopper access ladder, platform & mesh door with safety interlock.
Twin ejector blade cylinders for maximum compaction force and Payload.
Reinforced Eject Blade and Hopper Frame for a longer working life.



Bin Lifter Arms & Forks

2500kg Lift Capacity.
Arm Geometry provides optimum bin discharge position.
Zinc plated forks for reduced corrosion.
Arm Sensors protected by polycarbonate cap.



Hydraulics

Hose burst and counter balance valves.
High capacity load sensing piston pump.
Hydraulic filtration on pressure and return lines.
Hydraulic tank ball valves.



Electrical Control System

Bucher Municipal CANBus control system with diagnostic interface.
Proportional multi-function joystick.
Bucher 7" LCD screen.
Push button control console with back-lit buttons for greater visibility.



Lighting

LED upper and lower tail lights with guards
Rear mounted amber flashing beacon & guard.
LED tailgate side warning lights.
Two tailgate mounted work lights.
Two side body work lights.
Reverse lamp and alarm.
Body mounted side-marker LEDs.
Hopper & eject blade work lights.



Cab roof protector

Aluminium flipping roof.
Anti-slip & safety rails on body roof.



Mudguards and Mudflaps

Plastic mudguards fitted to rear axles and Bucher Branded Mudflaps fitted as standard.



Paint

Premium single colour 2 pack paint.
White Standard.



Technical Manuals

Either Printed copies or USB sticks are provided as standard.
Additional copies are available as an option.



Service & Warranty

First Service Labour costs included.
1 year/2500hours Warranty provides comprehensive protection.
Technical & Spare parts Manual.
Contact us for Maintenance packages.

Comprehensive Range of Options and Accessories

Contact us for more information.

Option Availability

General Data	FORCE 285	FORCE 335
Additional copies of technical manual		
Aluminium or stainless steel mudguards		
Hopper floor wear strips		
Arm & fork safety interlock (Brake pedal)		
Body Service Hoist		
Cab chassis paint		
Colour camera system		
Driver training		
Extended warranty - 2 years/5000 hours		
Fall arrest system		
Fire extinguisher (9kg)		
Fire Suppression system		
Front Zone System		
Handwash & soap dispenser		
Heavy Duty Forks		
Loadcells mounted under body		
Loadcells mounted on lift arms		
LED rear beacon		
MGB lifter		
Rear push bar		
Reverse Smart System		
Roof Access Ladder		
Sliding forks		
Spare wheel carrier		
Spray suppressant on wheel arches		
Toolbox		



Comprehensive Range of Options and Accessories continued...

Contact us for more information.



Body Service Hoist

Service hoist option available to raise front of body off sub-frame to enable access for maintenance under body.



Fire Suppressant System Options

The Fire suppressant system can be fitted to body and to cab chassis.



Aluminium/Steel Mudguards

For improved aesthetics and durability over the standard plastic mudguards.



Integrated Aluminium Mudguards

The mudguards are integrated into body structure and have a robust aluminium design.



Sliding Forks

The fork width is adjustable and can be controlled from the in-cab joystick. The single hydraulic cylinder is located under fork assembly.



Heavy Duty Forks

Provides additional lifting force out of the hopper to prevent heavy bins from getting stuck. 2400kg capacity.



Colour camera system

Multiple camera brands available, integrated with Bucher LCD screen for optimal safety vision. Single screen for less clutter in cab.



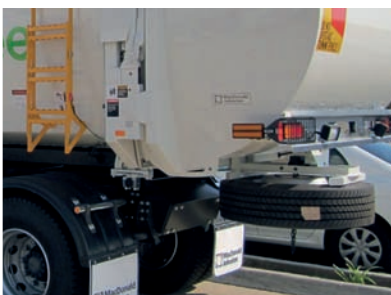
Hopper Floor Wear Strips

Wear resistant steel strips welded to hopper floor provides additional strength for heavy duty applications such as the collection of construction waste.



Arm and Fork Safety Interlock

The brake pedal must be applied to operate arms and forks. It ensures safe operation of vehicle to prevent damage to vehicle or property.



Spare Wheel Carrier

Operator can change tyre on site, rather than returning to the depot for repairs. With integrated hoist to raise and lower spare wheel for operator safety.



Toolbox

Chassis mounted toolbox for safe and convenient storage of items.



Fall arrest system

Industrial Fall Arrest System options available. Complete with Safety Harness and cable to connect operator to top of body for safe maintenance. Complies with AS/NZS 1891.

Comprehensive Range of Options and Accessories continued...

Contact us for more information.



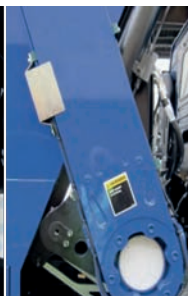
Bucher Underbody Load Cells

Fully integrated Bucher Load cell weighing system measures the payload weight and alerts the operator if the body exceeds legal weight limits. Operators can avoid costly infringement notices from transport authorities.



Loadrite™ Bin Weighing System

Load cell mounted to Bin Lifter Arm providing individual bin weights and total payload. In-cab display unit also provided for operator.



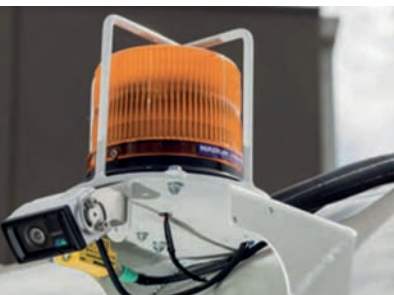
MGB Lifter

Suits full range of MGB's 80-1100L. With Wireless remote controls. Robust bolt-on design with Clamp bar and belt with winch provides maximum security.



Fire Extinguisher 4.5 – 9kg

Dry Chemical Type. Suitable for a range of fires including flammable liquids, electrical components and combustible materials such as wood, paper and plastics.



Strobe LED Beacon lights

Ensures maximum vehicle visibility. Multiple flashing patterns to suit various applications.



Hand wash facility – 20L

Plastic construction with recessed tap. Ensures durability of unit for long life. Integrated soap dispenser so operators can thoroughly wash hands to prevent spread of bacteria.



Hella LED Tail lights

Hella branded Upper and lower LED tail lights for maximum vehicle visibility in all conditions.



Hella LED Tail lights

Hella branded Upper and lower LED tail lights for maximum vehicle visibility in all conditions.



Reverse Smart System

Warning lights and sounds alert operator to objects detected behind vehicle. The trucks brakes will automatically engage when the object is within approx. 3m. Reduces risk of injuries to pedestrians and damage to vehicle and property.



Front ZONE System

Motion detection system alerts the operator when an object enters the work zone and then stops the bin lifter if the object enters the danger zone, preventing injury or damage. See next page for details.



Roof Access Ladder

Body mounted roof access ladder for safe access to the roof of the body for maintenance.



Rear Push Bar

The chassis mounted push bar allows vehicle to be pushed out of soft ground at landfill sites. It is integrated into rear body mount and prevents damaged to cab chassis and compactor body.

Comprehensive Range of Options and Accessories continued...

Contact us for more information.



Alternative Body or Chassis Paint

Additional paint colours and customised signwriting is available to suit customer specifications.



Technical Manual – Additional copies

Either Printed copies or USB sticks are available for purchase.



Driver Training

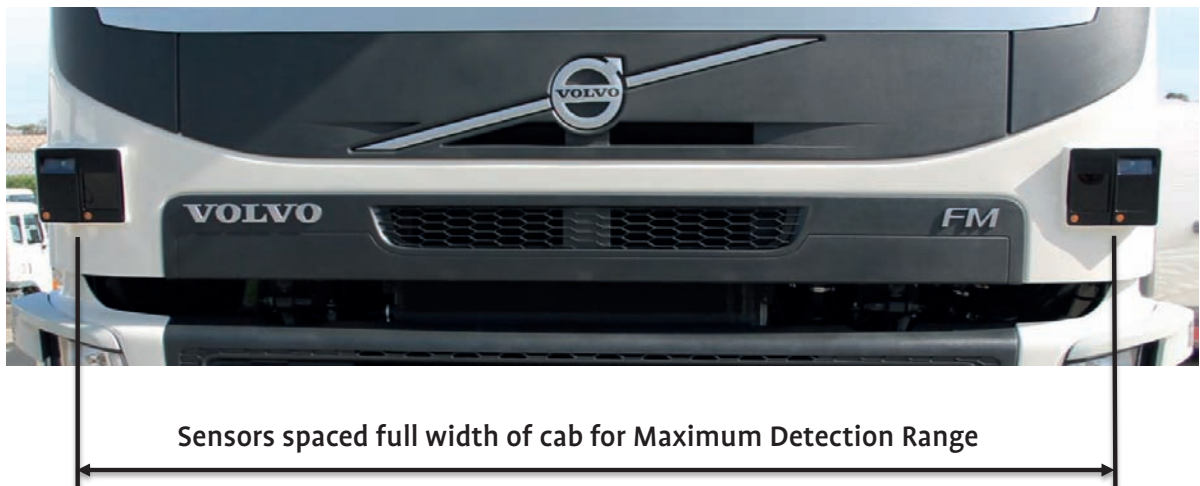
Operator training provided by Bucher Municipal staff. Ensures operators are familiar with controls and body functionality for safe and efficient vehicle operation.



Bucher Municipal Extended Warranty

Extended Warranty available providing comprehensive protection for 2 years/5000hrs. Maintenance packages available. Contact us for more information.

Front ZONE System – Pedestrian Detection



WORK ZONE

Operator is notified if object detected within 5m.
Continue operation with Caution!



DANGER ZONE

Bin Lifter operation will STOP if object is within 2.5m.

[illegible]

SERIES: FORCE SERIES II FRONT LOADER 28.5M³ – 33.5M³
DATE: AUG 2017

Customer Support Centre

65-73 Nantilla Road,
Clayton North, Vic.
3168 Australia
Phone +61 3 9271 6400
Fax +61 3 9271 6480

**Customer Service Centre
Southern Region (VIC/TAS)**

Unit 6, 80-84 Fairbank Road,
Clayton South, Vic.
3169 Australia
Phone +61 3 8558 3600
Fax +61 3 8558 3640

**Customer Service Centre
Central Region (NSW)**

Unit 2, 9 Enterprise Place,
Wetherill Park, NSW
2164 Australia
Phone +61 2 8787 9600
Fax +61 2 8787 9696

**Customer Service Centre
Western Region (WA,SA,NT)**

76 Grey Street,
Bassendean, WA
6054 Australia
Phone +61 8 9370 7900
Fax +61 8 9370 7998

**Customer Service Centre
Northern Region (QLD)**

50 Buchanan Road,
Banyo, QLD
4014 Australia
Phone +61 7 3363 6400
Fax +61 7 3363 6499

**Customer Service Centre
Western Victoria**

35 Spencer Street,
Sunshine, Vic.
3020 Australia
Phone +61 3 9314 8928
Fax +61 3 9318 0938

**Customer Service Centre
Central Region (NSW)**

35 Walker Street,
South Windsor, NSW
2756 Australia
Phone +61 2 4577 3099
Fax +61 2 4577 3022

**Customer Service Centre
South Australia**

4 Newcastle Crescent,
Cavan, SA
5094 Australia
Phone +61 8 8168 2222
Fax +61 8 8168 2240

refuse@buchermunicipal.com.au
www.buchermunicipal.com.au

The current Bucher international locations.

