

A brief guide for identification of non-compliant refuse collection vehicles



Is this refuse collection vehicle compliant with European legislation?

EUnited Municipal Equipment

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The European Municipal Equipment Industry – Solutions for a clean and safe urban environment.

EUnited Municipal Equipment is the European Association of Municipal Equipment Manufacturers. The association represents the leading manufacturers of mobile machines used in municipalities and other public areas.

EUnited Municipal Equipment is part of the umbrella organisation EUnited aisbl that gathers different sector associations within the European engineering industry. By joining forces with similar engineering sectors, the municipal equipment industry increases its visibility and creates added-value.

Introduction

Legal background

Refuse collection vehicles (RCV) placed on the EU market for the first time must comply with the relevant EU legislation – and meet all valid safety and environmental requirements. An RCV which does not fulfil these requirements is non-compliant and is not allowed to be placed on the EU market. Therefore, European Standards EN 1501 Part 1 to 5 provide detailed description regarding to the safety requirements of e.g. the Machinery Directive and Outdoor Noise Directive especially for RCV and their lifting devices.

According to the European Directive 2009/104/EC concerning the minimum safety and health requirements for the use and maintenance of work equipment by workers at work, employers who provide machines like an RCV as working equipment to their employees are obliged to make a risk assessment for the usage of the RCV.

The CE marking and the manufacturer's declaration of conformity with the European Machinery Directive do not discharge the employer from this obligation.

Consequences for customers and end-users

- Import and resale of a non-compliant RCV is an illegal act within the EU, because this RCV can neither be labeled with a legally valid CE-marking nor have a valid declaration of conformity.
- Employers are obliged to provide safe work equipment to their employees. Employers using non-compliant machines and providing those to their employees are exposed to liability under the national legislation transposing the EU legislation concerning safety and health of workers at work. National authorities have the right to impose sanctions on employers who infringe

their obligation to provide safe and compliant equipment to their employees. Such sanctions may be fines or even imprisonment.

- In case of accidents or of verification by the authorities, the RCV may be blocked and withdrawn from its use which causes a delay in the work and financial losses.
- Equipment insurance coverage may be invalid.
- Users of non-compliant RCV may be excluded from public tenders.
- Users of non-compliant RCV would lose their reputation as a contractor if these violations would become public.

Therefore, a simple check of an RCV could provide a first impression whether an RCV complies with the European Machinery Directive or not.

This guideline is meant to help to easily distinguish between compliant and non-compliant RCV. It describes only those essential criteria which can be checked even without in-depth knowledge and technical information. Thus, this brochure is not meant to be comprehensive but is designed to serve as an “early warning” tool. However, if one or more items are out of line with the criteria, then it is likely that you have non-compliant equipment.

EUnited Municipal Equipment, being the recognized association representing and promoting European municipal equipment manufacturers and related industries, calls upon all responsible authorities and stakeholders to work closely together in order to to rid the EU of non-compliant RCV.

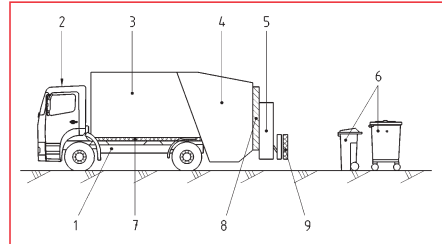
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Quick reference guide to non-compliance RCV

Most common items of non-compliance with EU regulations:

- Identification of machine and manufacturer
- Declaration of Conformity
- CE-Marking
- Instructions
- Noise labels
- Warnings and markings
- Controls
- Crushing / shearing zones
- Protection of hydraulic hoses
- Footboards and hand rails
- Footboards – Speed control and reverse gear function
- Footboards – Dimensions
- Automatic rear loaders

Scheme of an RCV



Key

- 1 Chassis
- 2 Cab
- 3 Body
- 4 Tailgate
- 5 Lifting device
- 6 Waste container
- 7 Interface chassis-bodywork
- 8 Interface tailgate-lifting device
- 9 Interface lifting device-waste container

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Identification of machine and manufacturer

All RCV placed on the EU market must be marked clearly and permanently in one of the languages of the Community.

As a minimum, all elements of the bodywork shall be identified by the following durable marking:

- Name and address of the manufacturer and, where applicable, the authorized representative
- CE-Marking
- Year of construction
- Designation of series or type
- Serial or identification number.



✓ Manufacturers plate with required information and separate CE Mark

Demountable and interchangeable waste container lifting device(s) shall, as a minimum, be identified by the following durable marking:

- Name and address of the manufacturer and, where applicable, the authorized representative
- Designation of the machinery
- CE-Marking
- Year of construction
- Designation of series or type
- Serial or identification number
- Type(s) of RCV onto which it can be fitted.

The maximum permissible lifting mass(es) shall be marked durably.



Example of declaration of the maximum permissible lifting masses



✓ Manufacturers plate with required information including CE Mark



✓ = Compliant

✗ = Non-compliant

Declaration of Conformity

All RCV bodies and lifting devices placed on the EU market for the first time must be accompanied by a Declaration of Conformity. The Declaration of Conformity for different directives can be separate.

The Declaration of Conformity is a critical document showing with which EU directives the machine complies with. It must be in a Community language and must include at least the following:

- A statement that the machine fulfils the requirements of the following EU Directives:
 - 2006/42/EC – the Machinery Directive;
 - 2000/14/EC – the Directive on Noise Emissions in the Environment by Equipment for Use Outdoors;
 - 2004/108/EC – the Directive on Electromagnetic Compatibility.
- The name and address of the manufacturers and of his EU representative, if applicable.
- A description of the machine, including designation and serial number. The serial number on the DoC must be the same as that marked on the machine.
- Name and address of the person in the EU who can be contacted to compile the technical file about the safety of the machine, if requested to do so by a suitable EU authority.
- The name and address of the person who keeps the technical documentation on noise emissions and the name of notified body involved.
- The conformity assessment procedure followed for noise emissions.
- The measured sound power level.
- The guaranteed sound power level.
- The date and place of the declaration.
- Identity and signature of the person making the declaration.

CE

EC - DECLARATION OF AGREEMENT FOR MACHINERY
Machinery directive / 2006 / 42 / EEC, annex IX
and
OF AGREEMENT FOR ENVIRONMENT
Environment directive / 2000 / 14 / EEC, annex II

NAME ADDRESS OF MANUFACTURER

Declares herewith that,

Machine	: Refuse collection vehicle
Brand	: BRAND NAME
Type	: BODY TYPE (LIFTING DEVICE)
Serial number	: SERIAL NUMBER
Certificate number	: CERTIFICATE NUMBER
Year made	: YEAR MADE
Measured sound power level	: VALUE dB Lwa
Guaranteed sound power level	: VALUE dB Lwa
Technical file compiled by	: NAME AND ADDRESS

- Is in compliance with the determinations of the Sound Power Directive (2000 / 14 / EEC, such as last changed);
- Is in compliance with the determinations of the Machinery Directive (2006 / 42 / EEC, such as last changed);
- Fulfilling harmonized standard is applied or main parts of it: **REFERENCE OF APPLIED STANDARDS**. And the latest added amendments on this version.
- And the requirements of Annex IV of the Machine Directive are fulfilled to:

NOTIFIED BODY INFORMATION

PLACE and represented by
Date: **DATE** **signature of person**

NAME RESPONSIBLE PERSON
FUNCTION OF THE SIGNER

Example of Declaration of Conformity

INSTRUCTIONS

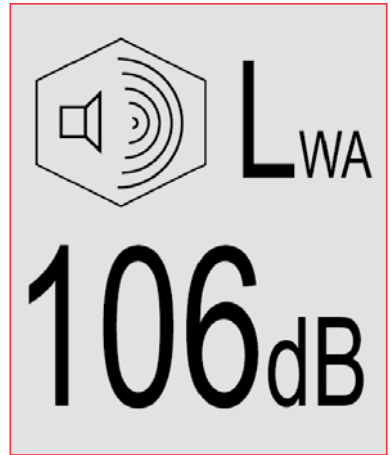
Instructions on the safe use are a requirement of EU law and must accompany the machine. The basic requirements are:

- They must be in the language of the member state where the machine is placed on the market or put into service.
- They must be either “Original instructions” or a “Translation of the original instructions”, in which case the translation must be accompanied by the original instructions.
- The words “Original instructions” must appear on the language version(s) verified by the manufacturer or his authorised representative. Where no “Original instructions” exist and translations have been provided the translations must bear the words “Translation of the original instructions”.
- The instructions must include the name and address of the manufacturer.
- The instructions must include a repeat of the machine markings, except for the serial number.
- The instructions must include a repeat of the main items of the Declaration of Conformity.
- The instructions must contain measurement results for noise and vibration levels in the operator’s place for this type of machine.



NOISE EMISSIONS

According to European Directive 2000/14/EC there is no limit value on noise emissions required for RCV. But, all RCV must be marked with their guaranteed sound power level.



Label showing the guaranteed sound power level





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WARNINGS AND MARKINGS

Information and warnings on machinery must be in pictograms or in a language of the Community for the country where the machine is placed on the market or put into service.

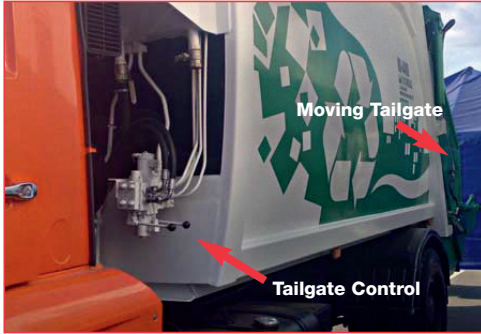
Examples for text labels and pictograms and their combinations:



DANGER!	
	In case of danger push EMERGENCY-STOP immediately!
	Rotating parts! Hands or fingers may be crushed! Keep your hands out of the binlift operating area. Do NOT reach past the plastic guards or the safety barriers!
	Container may fall and injure you! While binlift is operating keep outside the safety barriers!
	Swinging arm rotates! Do NOT stand between the safety barriers! You may be struck and injured!
	Do NOT climb on the binlift! You may be trapped by the lifter or the packer plate!
	Do NOT ride on the binlift! You may harm yourself!



Control of tailgate movements



- X** Tailgate control in front of the body without sufficient observation for the operator of the moving tailgate at the rear



- ✓** Tailgate control forcing 2-hand actuation and positioned to enable the operator to control the movement of the tailgate



- X** Direct operation of the tailgate, no 2-hand control.



- ✓** 2-hand control with buttons positioned in distance to force the operator to control the movement of the tailgate only by using both hands

Control of tailgate movements

Controls



X Control panel unprotected against unintended actuation



✓ Control panel with buttons protected against unintended actuation

Access doors



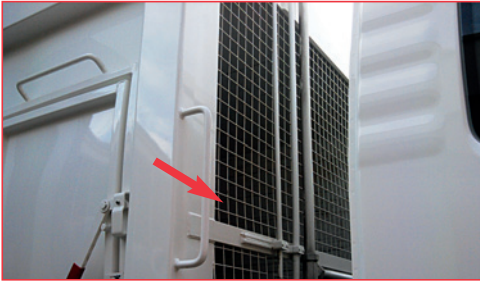
✓ Lockable access door with security switch

Controls

Access to crushing / shearing zones inside the RCV body



X Open entrance to shearing and crushing zones inside the RCV body.



✓ Closed RCV body

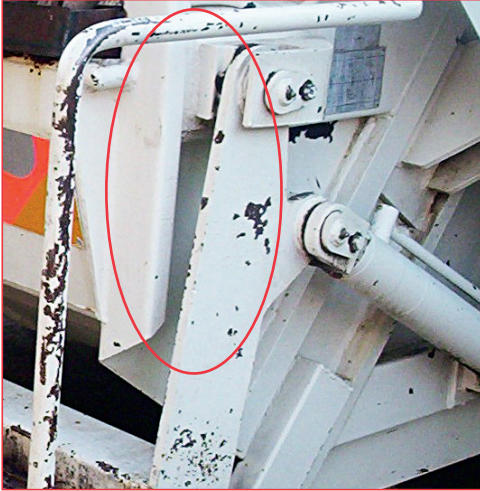


✓ Body made inaccessible by distance to cab - less than 250 mm

Access to crushing zones

Access

Crushing / shearing zones



X No guards protecting shearing zones



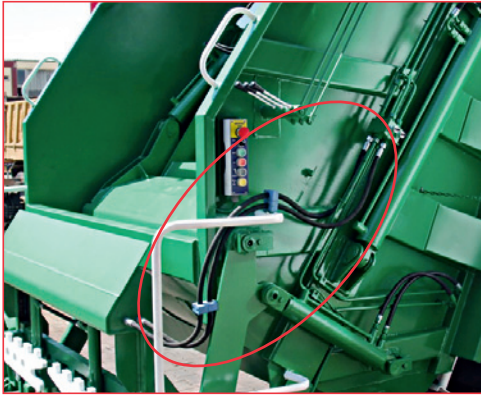
✓ Transparent and flexible guards covering shearing and crushing zones at the lifting device

Crushing/ shearing zones

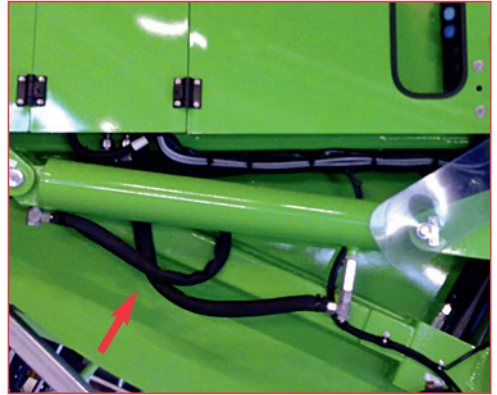


✓ Lockable side cover doors for shear protection

Protection of hydraulic hoses



X Unprotected hydraulic hoses close to the operators



X Protected hydraulic hoses close to the operators

Footboards and hand rails



✓ Ergonomic positioning of footboards and handrails in operation position



✓ Folded footboards and handrails in transport position

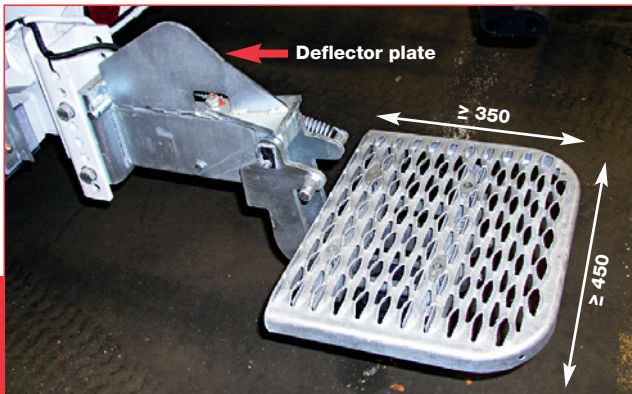
Footboards – dimensions, speed control & reverse gear function by mass detection system



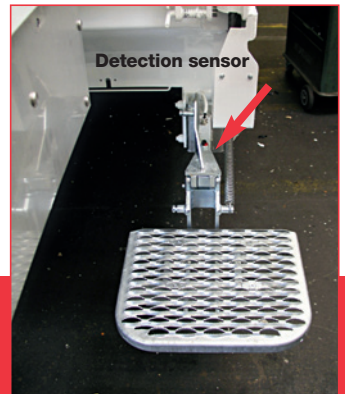
X Footboard – not tiltable, without detection system and without anti-slip surface



X Footboard – with insufficient dimensions of the fixed part and non controlled extensible part which could induce misuse

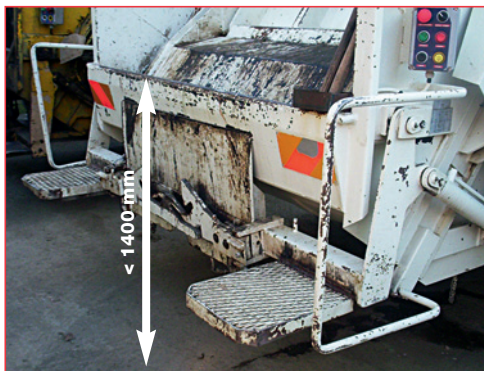


✓ Footboard with required dimensions, anti-slip surface, weight detection sensor and footboard arm with deflector plate



Footboards

Automatic rear loaders



- X** Automatic cycle with open system – Distance of the loading edge from ground is less than 1400 mm



- ✓** Automatic cycle with closed system from ground – distance between loading edge and ground is min. 1400 mm

Automatic rear loaders

Initiative supported by



What is EUnited?

EUnited Municipal Equipment is the European industry association representing the manufacturers of mobile municipal equipment like road sweepers, winter maintenance equipment, refuse collection vehicles and others.

Where can I get further information?

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**EUnited Municipal Equipment is a
sector group of EUnited aisbl – the European
Association of the Engineering Industry**