



TEST REPORT: LARGE BUS CONSTRUCTION

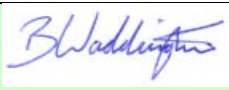
Directive 2001/85/EC
Regulation 107.02 up to and including
Supplement 5 ECE Regulation 107.04

Paragraph	Requirement	Complies (Yes, No, N/A)
-----------	-------------	----------------------------

REPORT/JOB NUMBER:	VSN255138
---------------------------	------------------

TEST DETAILS	
Location of Test	VCA Midland Centre Watling Street Nuneaton Warwickshire United Kingdom CV10 0UA
Date of Test	15 May 2012
VCA Representative(s)	Brent Waddington
Manufacturer's Representative(s)	Stuart Taylor
Reason for Test	Test report only to ensure compliance with Paragraph 7.6.10.9 of EC Directive 2001/85/EEC or 7.6.10.9 of Regulation 107.02 / 107.03

MANUFACTURER DETAILS	
Manufacturer's Name	WSH Taylor Engineering
Manufacturer's Address	Unit 36-39 Radway Industrial Park Radway Green Crewe Cheshire United Kingdom CW2 5PR
Model Type & description	ZM600H Single Manual step
Category	Separate Technical Unit

CONCLUSION	The above mentioned STU was tested in accordance with Paragraph 7.6.10.8 and 7.6.10.9 of Directive 2001/85/EC and ECE Regulation 107.04 and was found to comply in all respects	
	Signature:	
	Name:	Brent Waddington
	Position:	Type Approval Engineer
	Date:	15 MAY 2012

LIST OF ANNES		
ANN	No of PAGES	SUBJECT
1		
2		
3		
4		

**TEST REPORT: LARGE BUS
CONSTRUCTION**

Directive 2001/85/EC
Regulation 107.02 up to and including
Supplement 5 ECE Regulation 107.04

Paragraph	Requirement	Complies (Yes, No, N/A)
-----------	-------------	----------------------------

TEST SPECIFICATION AND WORST CASE RATIONALE

ZM600H Single Manual step mounted as a Separate Technical Unit to a test rig by means of four M6 fastenings at the front of the step and two M8 fasteners to the rear of the step. The test involved loading the step via a calibrated load cell with a 100mm diameter disc at the centre of the extended step with a force of 136 kg and measuring the deflection.

Additional models covered by Test: ZE600H Electric Frame Step

Reason: Identical frame construction as manual version ZM600H tested.

Tests required (if more than one is applicable)

- **Deflection test**

MANUFACTURER'S DOCUMENTATION

Manufacturer's documentation is complete and reflects the agreed specification for the component tested and covers all variants and versions agreed in the worst case rationale

Yes

FACILITY AND EQUIPMENT CHECKS

- | | | | | |
|---|---|----------------------------------|----------------------|-----|
| 1 | Generic Risk assessment followed | <i>Insert RA identifier here</i> | <input type="text"/> | Yes |
| | OR | | | |
| | Specific Risk assessment completed and stored in electronic job folder | | | No |
| 2 | Facilities and test equipment are appropriate | | | Yes |
| | Brief description of test equipment: | | | |
| 3 | Calibration certificates checked and valid, recorded in the following table | | | Yes |

Equipment	Serial No.	Calibration data
Load Cell/ Data reader	165096/1075184	19/10/2011
Measure		Confirmed zero at start



**TEST REPORT: LARGE BUS
CONSTRUCTION**
Directive 2001/85/EC
Regulation 107.02 up to and including
Supplement 5 ECE Regulation 107.04

Paragraph	Requirement	Complies (Yes, No, N/A)
-----------	-------------	----------------------------

TEST REQUIREMENTS

Regulation	Directive
------------	-----------

*Ann 3
7.6.10*

Ann I 7.6.10

TECHNICAL REQUIREMENTS FOR RETRACTABLE STEPS

<i>Ann 3 7.6.10.8</i>	<i>Ann I 7.6.10.8</i>	The corners of retractable steps facing forwards or rearwards shall be rounded to a radius of not less than 5mm; the edges shall be rounded to a radius of not less than 2.5mm	Yes
---------------------------	---------------------------	--	------------

<i>Ann 3 7.6.10.9</i>	<i>Ann I 7.6.10.9</i>	When the passenger door is open, the retractable step shall be securely held in the extended position. When a mass of 136 kg is placed in the centre of a single step or a mass of 272 kg is placed in the centre of a double step the deflection at any point on the step, measured relative to the body of vehicle, shall not exceed 10 mm.	Yes
---------------------------	---------------------------	---	------------

Test Results:

Step model	Load (kg)	Deflection (mm)
ZM600H	140.8	4.7



**TEST REPORT: LARGE BUS
CONSTRUCTION**
Directive 2001/85/EC
Regulation 107.02 up to and including
Supplement 5 ECE Regulation 107.04

Paragraph	Requirement	Complies (Yes, No, N/A)
-----------	-------------	----------------------------

Photographs of test set-up:

ZM600H





**TEST REPORT: LARGE BUS
CONSTRUCTION**
Directive 2001/85/EC
Regulation 107.02 up to and including
Supplement 5 ECE Regulation 107.04

Paragraph	Requirement	Complies (Yes, No, N/A)
-----------	-------------	----------------------------

