

TEST REPORT

Concerning the approval of motor vehicles and their trailers with regard to Directive 2007/46/EC of 5 September 2007.

Test report number : **RDW-2007/46-0109235**

0.1. Make : OPEL/VAUXHALL

0.2. Type : ETO (L1, L2) (Combo Life Tripod)

0.4. Category of vehicles : M1 (SH)

0.5. Name and address of the manufacturer : Tripod Mobility B.V.
Collseweg 10
5674 TR Nuenen
The Netherlands

Information document

- number : ETO-2007/46-1348

- dated : 24 September 2021

Conclusion : The type of vehicle described in point 0.1. to 0.5. meets the requirements of the above mentioned Directive. There are no objections to granting the approval under the above-mentioned Directive.

Vehicle type submitted for approval on : 19 October 2021

Inspections carried out by : R.T.F.W. Callaars

Zoetermeer (NL), 19 October 2021
The test engineer,



R.T.F.W. Callaars

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List of attached diagrams

Subject	Diagram number
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Reason for testing

Extension of the 2nd stage WVTa:

- Variant/versions deleted
- TR04S seats added for 2nd row
- WTD restraints with J-hooks added
- Unladen mass for some variant/versions modified
- List of assembly plants updated
- List of approval numbers and test report numbers updated

Used test equipment

Item	Identification number (make and type)	Calibration papers available
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Remarks

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1. Test results

- 1.1. Verification if all separate Directive approvals are applicable to the appropriate standard in the relevant separate Directive (Annex V point 1a):

The separate Directive approvals are applicable to the appropriate standard in the relevant separate Directive.

- 1.2. Verification if the data contained in Part I of the vehicle information document are included in the information package and/or the approval certificates of the relevant separate Directive approvals (Annex V point 1b):

The data of Part I of the information document of the vehicle are included in the information packages and/or the approval certificates of the relevant separate Directives or in case the information is not included in the information package of any of the regulatory acts, it has been confirmed that the relevant part or characteristic conforms to the particulars in the information folder.

- 1.3. Verification if the vehicle(s) is/are built in accordance with the relevant data contained in the information package in respect of all separate Directive approvals for vehicle parts and systems and the installation of technical units. (Annex V point 1c and 1d).

2. Checked items:

Vehicle category	M ₁	M ₂	M ₃	N ₁	N ₂	N ₃	O ₁	O ₂	O ₃	O ₄
Criteria										
Tested category	↓									
Engine	--	X	X	X	X	X	--	--	--	--
Gearbox	--	X	X	X	X	X	--	--	--	--
Number of axles	--	X	X	X	X	X	X	X	X	X
Powered axles (number, position, interconnection)	--	X	X	X	X	X	--	--	--	--
Steered axles (number and position)	--	X	X	X	X	X	X	X	X	X
Body styles	--	X	X	X	X	X	X	X	X	X
Number of doors	--	X	X	X	X	X	X	X	X	X
Hand of drive	--	X	X	X	X	X	--	--	--	--
Number of seats	X	X	X	X	X	X	--	--	--	--
Level of equipment	--	X	X	X	X	X	--	--	--	--



3. Test vehicle(s)

3.1. Vehicle description

	Test vehicle 1
Vehicle type	--
Vehicle variant	--
Vehicle version	--
Vehicle Identification Number	--
Engine	--
Gearbox	--
Number of axles	--
Powered axle(s)	--
Steered axle(s)	--
Body style	--
Number of doors	--
Hand of drive	--
Number of seats	--
Number of wheelchair positions	--

Remark: administrative assessment



No^(*)	Subject	Approval No	Covered variant / version	Conforms / comments
1A.	Permissible sound level	Stage 2: RDW-51R-0098775 (R51.03 suppl. 06)	all / all	conforms / see remarks
2.	Emissions (Euro 5 and 6) light-duty vehicles/ access to information	Stage 1: e2*2007/46*0622*15	all / all	conforms / see remarks
3A.	Prevention of fire risks (liquid fuel tanks)	Stage 2: RDW-34R-0098774 (R34.03 suppl. 02)	all / all	conforms / see remarks
3B.	Rear underrun protective devices (RUPDs) and their installation; rear underrun protection (RUP)	RDW-58R-0071711 (R58.03)	all / all	conforms / --
4A.	Space for mounting and fixing rear registration plates	Stage 1: e2*2007/46*0622*15	all / all	conforms / --
5A.	Steering equipment	Stage 1: e2*2007/46*0622*15	all / all	conforms / --
6A.	Vehicle access and manoeuvrability	Stage 1: e2*2007/46*0622*15	all / all	conforms / --
6B.	Door latches and door retention components	Stage 2: RDW-11R-0071703 (R11.04 suppl. 1)	all / all	conforms / -- conforms / --
7A.	Audible warning devices and signals	Stage 1: e2*2007/46*0622*15	all / all	conforms / --
8A.	Devices for indirect vision and their installation	Stage 1: e2*2007/46*0622*15	all / all	conforms / see remarks
9B.	Braking of passenger cars	Stage 1: e2*2007/46*0622*15	all / all	conforms / --
10A.	Electromagnetic compatibility	Stage 1: e2*2007/46*0622*15	all / all	conforms / --
12A.	Interior fittings	Stage 2: RDW-21R-0109237 (R21.01 suppl. 3)	all / all	conforms / --

^(*) Numbers according to Annex IV to Directive 2007/46/EC.

No (*)	Subject	Approval No	Covered variant / version	Conforms / comments
13B.	Protection of motor vehicles against unauthorised use	Stage 1: e2*2007/46*0622*15	all / all	conforms / --
14A.	Protection of the driver against the steering mechanism in the event of impact	Stage 1: e2*2007/46*0622*15	all / all	conforms / --
15A.	Seats, their anchorages and any head restraints	Stage 2: RDW-17R-0103778 (R17.09 suppl. 1)	all / all	conforms / see remarks
16A.	External projections	Stage 2: RDW-26R-0071708 (R26.03 suppl. 3)	all / all	conforms / see remarks
17A.	Vehicle access and manoeuvrability	see No 6A		
17B.	Speedometer equipment including its installation	Stage 1: e2*2007/46*0622*15	all / all	conforms / --
18A.	Manufacturer's statutory plate and vehicle identification number	Stage 1: e2*2007/46*0622*15 Stage 2: see appendix	all / all all / all	conforms / -- conforms / --
19A.	Safety-belt anchorages, Isofix anchorages systems and Isofix top tether anchorages	Stage 2: RDW-14R-0103777 (R14.09 suppl. 1)	all / all	conforms / see remarks
20A.	Installation of lighting and light-signalling devices on vehicles	Stage 1: e2*2007/46*0622*15	all / all	conforms / --
21A.	Retro-reflecting devices for power-driven vehicles and their trailers	covered by No 20A		
22A.	Front and rear position lamps, stop-lamps and end-outline marker lamps for motor vehicles and their trailers	covered by No 20A		



No (*)	Subject	Approval No	Covered variant / version	Conforms / comments
22B.	Daytime running lamps for power-driven vehicles	covered by No 20A		
22C.	Side-marker lamps for motor vehicles and their trailers	covered by No 20A		
23A.	Direction indicators for power-driven vehicles and their trailers	covered by No 20A		
24A.	Illumination of rear-registration plates of power-driven vehicles and their trailers	covered by No 20A		
25A.	Power-driven vehicle's sealed- beam headlamps (SB) emitting an European asymmetrical passing beam or a driving beam or both	covered by No 20A		
25B.	Filament lamps for use in approved lamp units of power-driven vehicles and their trailers	covered by No 20A		
25C.	Motor vehicle headlamps equipped with gas-discharge light sources	covered by No 20A		
25D.	Gas-discharge light sources for use in approved gas-discharge lamp units of power-driven vehicles	covered by No 20A		
25E.	Motor vehicle headlamps emitting an asymmetrical passing beam or a driving beam or both and equipped with filament lamps and/or LED modules	covered by No 20A		



No^(*)	Subject	Approval No	Covered variant / version	Conforms / comments
25F.	Adaptive front-lighting systems (AFS) for motor vehicles	covered by No 20A		
26A.	Power-driven vehicle front fog lamps	covered by No 20A		
27A.	Towing device	Stage 1: e2*2007/46*0622*15	all / all	conforms / --
28A.	Rear fog lamps for power- driven vehicles and their trailers	covered by No 20A		
29A.	Reversing lights for power- driven vehicles and their trailers	covered by No 20A		
30A.	Parking lamps for power- driven vehicles	covered by No 20A		
31A.	Safety-belts, restraint systems, child restraint systems and Isofix child restraint systems	Stage 2:RDW-16R-0109236 (R16.07 suppl. 5)	all / all	conforms / see remarks
32A.	Forward field of vision	Stage 1: e2*2007/46*0622*15		conforms / --
33A.	Location and identification of hand controls, tell-tales and indicators	Stage 1: e2*2007/46*0622*15	all / all	conforms / --
34A.	Windscreen defrosting and demisting systems	Stage 1: e2*2007/46*0622*15	all / all	conforms / --
35A.	Windscreen wiper and washer systems	Stage 1: e2*2007/46*0622*15	all / all	conforms / --
36A.	Heating systems	Stage 1: e2*2007/46*0622*15	all / all	conforms / --
37A.	Wheel guards	Stage 1: e2*2007/46*0622*15	all / all	conforms / --

No (*)	Subject	Approval No	Covered variant / version	Conforms / comments
38A.	Head restraints (headrests), whether or not incorporated in vehicle seats	covered by No 15A		
40.	Engine power	covered by No 2A		conforms / --
41A.	Emissions (Euro VI) heavy duty vehicles/access to information	not applicable for category M1 vehicles		
42A.	Lateral protection of goods vehicles	not applicable for category M1 vehicles		
43A.	Spray suppression systems	not applicable for category M1 vehicles		
44A.	Masses and dimensions	Stage 2: RDW-1230/2012-0109706 (1230/2012*2019/1892)	all / all	conforms / see remarks
45A.	Safety glazing materials and their installation on vehicles	Stage 1: e2*2007/46*0622*15	all / all	conforms / --
46A.	Installation of tyres	Stage 1: e2*2007/46*0622*15	all / all	conforms / --
46B.	Pneumatic tyres for motor vehicles and their trailers (Class C1)	covered by No. 46A		
46C.	Pneumatic tyres for commercial vehicles and their trailers (Classes C2 and C3)	not applicable for category M1 vehicles		
46D.	Tyre rolling sound emissions, adhesion on wet surfaces and rolling resistance (Classes C1, C2 and C3)	Stage 1: e2*2007/46*0622*15	all / all	conforms / --
46E.	Temporary-use spare unit, run-flat tyres/system and tyre pressure monitoring system	Stage 1: e2*2007/46*0622*15	all / all	conforms / --



No^(*)	Subject	Approval No	Covered variant / version	Conforms / comments
47A.	Speed limitation of vehicles	not applicable for category M1 vehicles		
48A.	Masses and dimensions	not applicable for category M1 vehicles		
49A.	Commercial vehicles with regard to their external projections forward of the cab's rear panel	not applicable for category M1 vehicles		
50A.	Mechanical coupling components of combinations of vehicles	not applicable; see remarks		
50B.	Close-coupling device (CCD); fitting of an approved type of CCD	not applicable for category M1 vehicles		
51A.	Burning behaviour of materials used in the interior construction of certain categories of motor vehicles	not applicable for category M1 vehicles		
52A.	M2 and M3 vehicles	not applicable for category M1 vehicles		
52B.	Strength of the superstructure of large passenger vehicles	Stage 2: not applicable for category M1 vehicles		
53A.	Protection of occupants in the event of a frontal collision	Stage 2: this regulatory act is not applicable to this vehicle		
54A.	Protection of occupants in the event of lateral collision	this regulatory act is not applicable to this vehicle		
56A.	Vehicles for the carriage of dangerous goods	not applicable for category M1 vehicles		



No (*)	Subject	Approval No	Covered variant / version	Conforms / comments
57A.	Front underrun protective devices (FUPDs) and their installation; front underrun protection (FUP)	not applicable for category M1 vehicles		
58.	Pedestrian protection Braking (brake assist)	Stage 1: e2*2007/46*0622*15 Stage 1: e2*2007/46*0622*15	all / all all / all	conforms / -- conforms / --
59.	Recyclability	not applicable	all / all	conforms / see remarks
61.	Air-conditioning systems	Stage 1: e2*2007/46*0622*15	all / all	conforms / --
62.	Hydrogen system	not applicable		
63.	General Safety	not applicable		
64.	Gear shift indicators	Stage 1: e2*2007/46*0622*15	all / all	conforms / --
65.	Advanced emergency braking system	not applicable for category M1 vehicles		
66.	Lane departure warning system	not applicable for category M1 vehicles		
67.	Specific components for liquefied petroleum gases (LPG) and their installation on motor vehicles	not applicable		
68.	Vehicle alarm systems (VAS)	covered by No 13B		
69.	Electric safety	not applicable		
70.	Specific components for CNG and their installation on motor vehicles	not applicable		



No (*)	Subject	Approval No	Covered variant / version	Conforms / comments
72	eCall system	not applicable		

The vehicle(s) is/are built in accordance with the relevant data contained in the information package of all separate Directive approvals and the installation of the separate technical units.

Remarks:

- Item 1A: The exhaust system slightly modified. Exhaust silencers remain unchanged. The test results of stage 1 remain valid.
- Item 2: Changes to the exhaust system have been permitted without retest as permitted by 2007/46/EC, annex XI, Appendix 3.
- Item 3A: New fuel tank mounted. Accessories from original tank.
- Item 8: The installation of a wheelchair ramp does affect the rear field of vision of the interior rear-view mirror. The right and left OEM exterior rear-view mirrors remain unchanged and meet the requirements.
- item 15A: Sufficient space is provided for a wheelchair as specified by 2007/46/EC Annex XI, Appendix 3. See also information document.
- Item 19A Tests have been performed for the wheelchair and occupant restraint system as specified by 2007/46/EC, Annex XI, Appendix 3. (as amended by 214/2014/EC); see appendix
- Item 31A The integrated restraint systems for the wheelchair and occupant meets the requirements of the Regulation and as specified by 2007/46/EC Annex XI, Appendix 3; see appendix
- Item 44A Consideration has been made of the effects of carrying a wheelchair as required by 2007/46/EC Annex XI, Appendix 3. (as amended by 214/2014/EC)
Number of rear passengers may need to be reduced when transporting a wheelchair (160 kg). Limitation in passenger capacity shall be included in the certificate of conformity.
- Item 50. The special use of the stage 2 vehicle requires the definite removal of any rear coupling device.
- Item 53A. No new tests has been carried out at stage 2 as permitted by 2007/46/EC, Annex XI, Appendix 3.



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No^(*)	Subject	Approval No	Covered variant / version	Conforms / comments
Item 54A.	No new tests has been carried out at stage 2 as permitted by 2007/46/EC, Annex XI, Appendix 3.			
Item 59.	Multistage vehicles and wheelchair accessible vehicles are exempted from recyclability as permitted by 2007/46/EC.			



Appendix

Additional requirements for testing the wheelchair tie down and occupant restraint system (according Annex XI, Appendix 3)

I. General requirements

- 1.1 Each wheelchair location shall be provided with anchorages to which a wheelchair tie-down and occupant restraint system (WTORS) shall be fitted. : pass
- 1.2 The wheelchair occupant's lower belt anchorages shall be located in accordance with UNECE Regulation 14-07, paragraph 5.4.2.2, relative to Point P on the SWC when placed in the travelling position designated by the manufacturer. The upper actual anchorage (s) shall be located at least 1 100 mm above the horizontal plane passing through the points of contact between the rear tyres of the SWC and the vehicle floor. This condition shall still be satisfied after the test carried out according to paragraph 2. below. : pass; see test report VCA No ESU437411-WAV, ESU452451-WAV, ESV469420-WAV
- 1.3 An assessment shall be made of the WTORS occupant belt to ensure compliance with the provisions of UNECE Regulation 16-06 paragraphs 8.2.2 to 8.2.2.4 and 8.3.1 to 8.3.4. : pass; see test report VCA No ESU437411-WAV, ESU452451-WAV, ESV469420-WAV
- 1.4 The minimum number of ISOFIX child seat anchorages need not to be provided. In the case of a multi-stage approval where an ISOFIX anchorage system has been affected by the conversion, the system shall either be re- tested or the anchorages shall be rendered unusable. In the latter case the ISOFIX labels shall be removed and appropriate information given to the vehicle purchaser. : applied; ISOFIX child seat anchorages t available in OEM 2nd row seats.
- 2 Static in-vehicle testing
- 2.1 Wheelchair occupant restraint anchorages
- 2.1.1 The wheelchair occupant restraint anchorages shall resist the static forces prescribed for occupant restraint anchorages in UNECE Regulation 14-07 simultaneously with the static forces applied to the wheelchair tie- down anchorages as specified in 2.2 below. : N/A (dynamic tests carried out)
- 2.2 Wheelchair tie-down anchorages



The wheelchair tie-down anchorages shall resist the following forces, for at least 0.2 seconds, applied via the SWC (or a suitable surrogate wheelchair having a wheelbase, seat height and tie-down attachment points in accordance with the specification for the SWC), at a height of 300 +/- 100 mm from the surface on which the SWC rests:

: N/A (dynamic tests carried out)

- 2.2.1. In the case of a forward-facing wheelchair, a simultaneous force, coincident with the force applied to the occupant restraint anchorages, of 24,5 kN and

: N/A (dynamic tests carried out)

- 2.2.2. a second test applying a static force of 8,2 kN directed towards the rear of the vehicle

: pass; see test report RDW-14R-00717004

- 2.2.3. In the case of a rearward-facing wheelchair, a simultaneous force, coincident with the force applied to the occupant restraint anchorages, of 8,2 kN and

: N/A

- 2.2.4. a second test applying a static force of 24,5 kN directed towards the front of the vehicle.

: N/A

- 2.3. Components of the system

- 2.3.1. All components of the WTORS shall meet the relevant requirements of ISO 10542-1:2012. However, the dynamic test specified in Annex A and paragraphs 5.2.2 and 5.2.3 of ISO 10542-1:2012 shall be carried out on the complete WTORS using the vehicle anchorage geometry instead of the test geometry specified in Annex A of ISO 10542-1:2012. This may be carried out within the vehicle structure or on a surrogate structure representative of the vehicle's WTORS anchorage geometry. The location of each anchorage shall lie within the tolerance provided for in point 7.7.1 of UNECE Regulation No 16-06.

: pass; see test report VCA No ESU437411-WAV, ESU452451-WAV, ESV469420-WAV, ESV478455

- 2.3.2. Where the occupant restraint part of the WTORS is approved according to UNECE Regulation No 16-06, it shall be subject to the dynamic test of the complete WTORS specified in paragraph 2.3.1, but the requirements of Paragraphs 5.1, 5.3 and 5.4 of ISO10542-1:2012 shall be considered to have been met.

: N/A



3. Dynamic in-vehicle testing

- 3.1. The full assembly of the WTORS system shall be tested by an in-vehicle dynamic test in line with paragraphs 5.2.2 and 5.2.3 and Annex A of ISO 10542-1:2012, testing all components/anchorages simultaneously, using a vehicle body-in-white or representative structure.

: pass; see test report
VCA No
ESU437411-WAV,
ESU452451-WAV,
ESV469420-WAV
ESV478455

- 3.2. The component parts of the WTORS shall meet the relevant requirements of ISO10542-1:2012 paragraphs 5.1, 5.3 and 5.4. These requirements shall be deemed to have been met in respect of the occupant restraint if it is approved according to UNECE Regulation No 16-06.

: pass; see test report
VCA No
ESU437411-WAV,
ESU452451-WAV,
ESV469420-WAV
ESV478455



Additional requirements regarding the identification of the vehicle

4.1. Vehicle identification number

- (a) The identification number of the base vehicle (VIN) prescribed by Directive 19/2011/EEC shall be retained during all the subsequent stages of the type-approval process to ensure the 'traceability' of the process : pass; see stage 1
- (b) However, at the final stage of completion, the manufacturer concerned by this stage may replace, in agreement with the approval authority, the first and second sections of the vehicle identification number by his own vehicle manufacturer code and the vehicle identification code if, and only if, the vehicle has to be registered under his own trade name : not applicable
- In such a case, the complete vehicle identification number of the base vehicle shall not be deleted : --

4.2. Additional manufacturer's plate

- At the second and subsequent stages, in addition to the statutory plate prescribed by Directive 19/2011/EEC, each manufacturer must affix to the vehicle an additional plate the model of which is shown in the appendix to this Annex. This plate must be firmly attached, in a conspicuous and readily accessible position on a part not subject to replacement in use : pass
- It must show clearly and indelibly the following information in the order listed
- name of the manufacturer : pass
 - Sections 1, 3 and 4 of the EC type-approval number : pass
 - maximum permissible laden mass of the vehicle : pass
 - maximum permissible laden mass of the combination (where the vehicle is permitted to tow a trailer) : pass
 - maximum permissible mass on each axle, listed in order from front to rear : pass
 - in the case of a semi-trailer or centre axle trailer, the maximum permitted mass on the coupling device : pass
- Unless otherwise provided for above, the plate must comply with the requirements of Directive 19/2011/EEC : pass

