



Vehicle Certification Agency

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THE UNITED KINGDOM VEHICLE APPROVAL AUTHORITY Whole Vehicle - issue letter

23 May 2017

Dear Sir / Madam,

Please find enclosed your issued Whole Vehicle approval document. Now that the approval has been formally issued you are able to prepare for vehicles built in full conformity with this approval to be presented for registration. Please be advised to check the national requirements of the country you are intending to register vehicles to establish the timeframe that they will work to once they are notified of the approvals existence.

If you believe that any changes are required to this approval please notify the issuing officer within 10 working days of receiving this approval.

Around twenty working days after the date of issue the approval, if European Whole Vehicle or European Small Series, will be made available to the other European Approval Authorities via a secure web-site. If any changes are required after the approval is loaded onto the web-site this would result in a formal update to the approval being required. If you wish for the approval to be circulated sooner than the 20 working days please let the issuing officer know, by e-mail, so that the approval can be circulated.

While the attached approval is valid at the time of issue the following has to be taken into consideration as to when the approval needs to be update to retain this validity:

- Conformity of Production must remain valid for the stated manufacturer and assembly plants and for the test standards required to issue this approval
- If any details on the following pages is changed, whether through a technical change to the production process, or through an administrative change (e.g. adding an additional commercial name or assembly plant) the approval would need to be updated
- If the legislation requires the test standards for this category of vehicle to alter and the related System and Component approvals and / or technical reports are updated, then, in most cases, this approval would require an update to incorporate the changes
- For a multi-stage approval an update to the previous stage(s) of the approval via an extension to the relevant Whole Vehicles would also result in an extension to this approval

Yours faithfully

D LAWLOR
Chief Technical and Statutory Operations Officer



Vehicle Certification Agency

THE UNITED KINGDOM VEHICLE APPROVAL AUTHORITY

COMMUNICATION CONCERNING TYPE-APPROVAL⁽¹⁾ / EXTENSION OF TYPE-APPROVAL⁽¹⁾ /
~~REFUSAL OF TYPE-APPROVAL⁽¹⁾ / WITHDRAWAL OF TYPE-APPROVAL⁽¹⁾~~ OF A TYPE OF
VEHICLE WITH REGARD TO DIRECTIVE 2002/24/EC AS LAST AMENDED BY DIRECTIVE
2013/60/EU.

EC type-approval No: e11*2002/24*1969*01

Reason(s) for extension: To cover:

1. Add 249W Electrical motor
2. Add new make and Commercial name

0. GENERAL

- 0.1. Make(s) (trade name of the manufacturer): XINRI, SUNRA, KRAL, YUKI, ARCHOS, EV BLANSON,S.L., Barton Motors, E-ROAD, ARORA, BIR, SOLID, LKG, ORAIO, MULTI, MALEK, MOTORAN, altai, yesilyurt, Robbo, Motolux, Mezz, Altvero, Motodell, Motomz, MPI, ORAIO, SDR, Paradise Island EVs, Multi, MALEK, MECBAT, Robbo, SAV distribution, MOTORAN, VOLTA, volta,

- 0.2. Type: HAWK

- 0.2.1. Commercial name(s): HAWK, KAPLAN, MILLE 5000, MILLE 250, KR-57, WOLF, Rossi3000, Rossi3500, Rossi4000, Rossi4500, Rossi5000, Rossi5500, Alf3000, Alf3500, Alf4000, Alf4500, Alf5000, Alf5500, Ceylan3000, Ceylan3500, Ceylan4000, Ceylan4500, Ceylan5000, Ceylan5500, EXECUTIVE, S5, Bravis, bravis, KAPLAN 249, KAPLAN249, VS8

- 0.3. Means of identification of type, if marked on the vehicle: Vehicle Identification Number

- 0.3.1. Location of that marking: Refer to drawing No. HAWK-14

- 0.4. Category⁽²⁾: L1e

- 0.5. Name and address of the vehicle manufacturer:

Jiangsu Xinri E-Vehicle Co.,Ltd.
No.501, Xishan Road, Anzhen Town, Xishan District
Wuxi City, Jiangsu
PEOPLE'S REPUBLIC OF CHINA

CWS381379

0.5.1. Name(s) and address(es) of assembly plant(s):

Jiangsu Xinri E-Vehicle Co.,Ltd.
No.501, Xishan Road, Anzhen Town, Xishan District
Wuxi City, Jiangsu
PEOPLE'S REPUBLIC OF CHINA

The undersigned hereby certifies the accuracy of the manufacturer's description in the attached information document of the vehicle type described above, for which one or several representative samples, selected by the competent approval authorities, has (have) been submitted as prototype(s) of the vehicle type and that the attached test results are applicable to the vehicle type.

The vehicle type meets /~~does not meet~~⁽¹⁾ the technical requirements of all relevant separate Directives (as last amended) listed in the table of Annex I to Directive 2002/24/EC.

The approval is GRANTED /~~REFUSED / WITHDRAWN~~⁽²⁾

Place: BRISTOL

Signature:



D LAWLOR

Chief Technical and Statutory Operations Officer

Date: 23 MAY 2016

Attachments:

Information document, Parts 1 and 2 (Annex II).

Test results (Annex VII).

Name(s) and specimen(s) of the signature of the persons authorised to sign the certificates of conformity and a statement of their position in the company.

A model certificate of conformity.

- (1) Delete where not applicable
- (2) According to the classification introduced in Article 1



Vehicle Certification Agency

VEHICLE CERTIFICATION AGENCY

ANNEX VII – TEST RESULTS

e11*2002/24*1969*01

(Article 5(1), first subparagraph)

(This sheet must be completed by the approval authority and be attached to the vehicle type approval certificate)

In each case, the information must make clear to which variant and version it is applicable.

One version may not have more than one result.

Note : Electric Moped doesn't conduct emissions and sound level tests.

1. Results of the sound level tests according to Directive 97/24/EC Chapter 9

Variant/version : See information documentation

Moving dB(A) : NA

Stationary dB(A) : NA

at (min⁻¹) : NA

2. Results of the exhaust emission tests according to Directive 97/24/EC Chapter 5 Annex I, as amended by 2013/60/EU



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VEHICLE CERTIFICATION AGENCY

Variant/version : See information documentation

2.1. Type I

CO (g/km) : NA
HC (g/km) (1) : NA
NOx (g/km) (1) : NA
HC + NOx (g/km) (2) : NA

2.2 Type II

CO (g/min) (1) : NA
HC (g/min) (1) : NA
CO (% vol) at normal idle speed (2) : NA
Specify the idle speed (2) (3) : NA
CO (% vol) at high idle speed (2) : NA
Specify the idle speed (2) (3) : NA
Engine oil temperature (2) (4) : NA

3. Compression ignition engine : NA

Variant/version : NA

Corrected value of absorption coefficient: NA
(m^{-1})



Vehicle Certification Agency

THE UNITED KINGDOM VEHICLE APPROVAL AUTHORITY

APPROVAL NUMBER: e11*2002/24*1969*01

INFORMATION PACKAGE CONTENTS

INDEX REVISION NUMBER: 01 (One)

Total number of sheets: 58 (Fifty Eight)

Reasons for Revision: See approval certificate

Revision date
&
Office stamp



CWS381379

An executive agency of the Department for Transport
March 2017 Revision 4

Jiangsu Xinri E-Vehicle Co.,Ltd.

Information document: 2002/24-HAWK-01

Application date: 11 January 2017

Dear Sirs

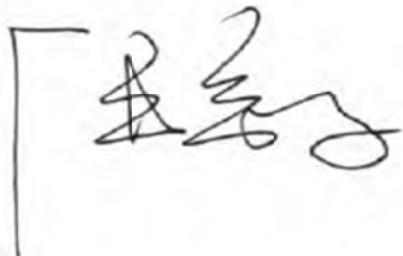
We as manufacturer/authorized representative¹ ask for a type approval acc. To 2002/24/EC for the following vehicle type:

¹delete where applicable

Vehicle type : HAWK
Vehicle category : L1e
Name and address manufacturer : Jiangsu Xinri E-Vehicle Co.,Ltd.
No.501, Xishan Road, Anzhen Town, Xishan District, Wuxi City, Jiangsu, P.R.China
Name and address of manufacturers representative : NGTS Conception
Parc de l'innovation Rue de Menin 59520 Marquette-lez-Lille FRANCE

We confirm that the above mentioned application has not been submitted to any Other EEC member state nor has any member state granted a corresponding type approval.

With best regards,



Mr. Ren Yi /manager

Jiangsu Xinri E-Vehicle Co.,Ltd.

Jiangsu Xinri E-Vehicle Co.,Ltd.

Information document: 2002/24-HAWK-01

Application date: 11 January 2017

APPROVAL HISTORY

APPLICATION FOR APPROVAL

Subject : two-wheel moped

Manufacturer : Jiangsu Xinri E-Vehicle Co.,Ltd.

Type :HAWK

Category : L1e

Applicable EC directive: 2002/24/EC

APPROVAL HISTORY

Approval No.(EEC) : e11*2002/24*1969***01**

EXTENSION No.	REASON FOR EXTENSION	JOB NUMBER	APPLICATION DATE
00 (Base approval)	Not applicable	CWS378045	28 November 2016
01	1.Add 249W Electrical motor 2.Add new make and Commercial name	CWS381379	11 January 2017



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016

Document information about **two-wheels mopeds**

Reference number of information document: **2002/24-HAWK-01**

Application date: **28 November 2016**

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III STATEMENT CONCERNING ANTI TAMPERING REQUIREMENTS AND ANTI THEFT DEVICE (IF APPLICABLE)



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information document: 2002/24-HAWK-01

Application date: 11 January 2017

2002/24/EC ANNEX II

INFORMATION DOCUMENT ^(a)

PART 1

A. INFORMATION RELATING JOINTLY TO MOPEDS, MOTOR CYCLES, MOTOR TRICYCLES AND QUADRICYCLES

0. General

0.1. Make

: XINRI,SUNRA,KRAL,YUKI,ARCHOS,
EV BLANSON,S.L.,Barton Motors,E-ROAD,
ARORA ,BIR,SOLID , LKG , ORAIO ,MULTI,
MALEK , MOTORAN ,altai ,yesilyurt , Robbo ,
Motolux,Mezz,Altmoto,Motodell,Motomz ,MPI,
ORAIO,SDR,Paradise Island EVs,Multi,MALEK,
MECBAT,Robbo,SAV distribution,MOTORAN,


0.2. Type (state any possible variants and versions: each variant and each version must be identified by a code consisting of numbers or a combination of letters and numbers)

Variant

: HAWK

: Variant 1:45km/h 3000W lead-acid batteries
Variant 2:25km/h 3000W lead-acid batteries
Variant 3:45km/h 3000W lithium battery
Variant 4:25km/h 3000W lithium battery

Variant 6:25km/h 249W lead-acid batteries

Version

00

0.2.1. Commercial name (where applicable)

: HAWK,KAPLAN,MILLE 5000,MILLE 250,KR-57,
WOLF, Rossi3000,Rossi3500,Rossi4000,Rossi4500,
Rossi5000,Rossi5500,Alf3000,Alf3500,Alf4000,
Alf4500,Alf5000,Alf5500,Ceylan3000,Ceylan3500,
Ceylan4000,Ceylan4500,Ceylan5000,Ceylan5500,
EXECUTIVE,S5,  KAPLAN 249W,


0.3. Means of type identification if stated on vehicle ^(b)

: VIN

0.3.1. Location of that means of identification

: Refer to drawing No. HAWK-14

0.4. Vehicle category^(c)

: L1e

0.5. Name and address of manufacturer

: Jiangsu Xinri E-Vehicle Co.,Ltd.

No.501, Xishan Road,Anzhen Town,Xishan District,Wuxi City,Jiangsu,P.R.China

0.5.1. Name(s) and addressee(s) of assembly plants

: Jiangsu Xinri E-Vehicle Co.,Ltd.

No.501, Xishan Road,Anzhen Town,Xishan District,Wuxi City,Jiangsu,P.R.China

0.6. Name and address of manufacturer's authorised representative, if any

: NGTS Conception

Parc de l'innovation Rue de Menin 59520 Marquette-lez-Lille FRANCE



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information document: 2002/24-HAWK-01

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0.7.	Location and method of affixing statutory inscriptions to the chassis	: statutory inscription affixing on the right side of the chassis by rivets and VIN number stamped on the right side of chassis
0.7.1.	The serial numbering of the type begins with No	: Variant 1:★LXRBE0GW1H0901369★ Variant 2:★LXRBE0GX4H090001★ Variant 3:★LXRBE0GY3H090001★ Variant 4:★LXRBE0GZ2H090001★ Variant 5:★LXRBA0GW4H0900101★ Variant 6:★LXRBA0GX0H090001★
0.8.	Position and method of affixing the component type-approval mark for components and separate technical units	: not applicable

1. General arrangement of the vehicle

1.1.	Photos and/or drawings of a typical vehicle	: Refer to drawing No. HAWK-01
1.2.	Dimensional drawing of the complete vehicle	: Refer to drawing No. HAWK-01
1.2.1.	Wheelbase	: 1325mm
1.3.	Number of axles and wheels (where appropriate, number of crawler tracks or belts)	: 2 axles / 2 wheels
1.4.	Position and arrangement of engine	: electrical engine in rear wheel
1.5.	Number of seating positions	: 2
1.6.	Hand of drive - left or right ⁽¹⁾	: Left and Right
1.6.1.	Vehicle is equipped to be driven in right-hand or left-hand rule of the road traffic ⁽¹⁾	

2. Masses (in kg)⁽²⁾

2.0.	Unladen mass ^{(d) (i)}	: Variant 1,2, 5,6 :126kg Variant 3,4:94kg
2.1.	Mass of vehicle in running order ⁽ⁱ⁾	: Variant 1,2, 5,6 :126kg Variant 3,4:94kg
2.1.1.	Distribution of that mass between the axles	: Variant 1,2, 5,6 : Front:49kg ,Rear:77kg Variant 3,4: Front:38kg ,Rear:56kg
2.2.	Mass of vehicle in running order , together with rider	: Variant 1,2, 5,6 :201kg Variant 3,4:169kg
2.2.1.	Distribution of that mass between the axles	: Variant 1,2, 5,6 : Front:76kg ,Rear:125kg Variant 3,4: Front:70kg ,Rear:99kg
2.3.	Maximum technically permissible mass declared by the manufacturer	: Variant 1,2, 5,6 :276kg Variant 3,4:244kg
2.3.1.	Division of that mass between the axles	: Variant 1,2, 5,6 : Front:86kg ,Rear:190kg

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Variant 3,4: Front:76kg ,Rear:168kg

2.3.2.	Maximum technically permissible mass on each of the axles	: Front :86kg Rear :190kg
2.4.	Maximum hill-starting ability at the maximum technically permissible mass declared by the manufacturer	: 15°
2.5.	Maximum towable mass (where applicable)	: not applicable
2.6.	Maximum mass of the combination	: not applicable

3. Engine ^(e)

3.0.	Manufacturer	: Taizhou SINE motor Technology Co., Ltd
3.1.	Make	: SINE
3.1.1.	Type (stated on the engine, or other means of identification)	: Variant 1,2,3,4:XR3000W72V Variant 5,6:XR24972V
3.1.2.	Location of engine number (if applicable)	: On the surface of the engine
3.2.	Spark- or compression ignition engine ⁽¹⁾	: not applicable.
3.3.	Electric traction motor	
3.3.1.	Type (winding, excitation)	: Winding
3.3.1.1.	Maximum continuous rated power ^(k)	: Variant 1,2,3,4:3000W Variant 5,6:249W
3.3.1.2.	Operating voltage	: 72V
3.3.2.	Battery	
3.3.2.1.	Number of cells	: Variant 1,2, 5,6 :6 lead-acid batteries Variant 3,4:1 lithium battery
3.3.2.2.	Mass	: Variant 1,2, 5,6 :42kg Variant 3,4:10kg
3.3.2.3.	Capacity	: 20Ah
3.3.2.4.	Location	: Under cushion Refer to drawing No. HAWK-02 Refer to drawing No. HAWK-02-1
3.4.	Other motors or combinations of motors (specific information concerning the parts of those motors)	: not applicable
3.5.	Cooling system temperatures permitted by the manufacturer	: not applicable
3.6.	Lubrication system	: not applicable

4. Transmission ^(h)

4.1.	Diagram of transmission system	: not applicable
4.2.	Type (mechanical, hydraulic, electrical, etc.)	: not applicable
4.3.	Clutch (type)	: not applicable



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4.4. Gearbox

4.4.1. Type : not applicable

4.4.2. Method of selection : not applicable

4.5. Gear ratios

4.5.1. Brief description of the electrical and/or electronic components used in the transmission : not applicable

4.6. Maximum speed of vehicle and gear in which it is reached (in km/h)⁽ⁱ⁾ : variant 1,3: 45 km/h

variant 5: 40 km/h

variant 2,4,**6:** 25 km/h

4.7. Speedometer

4.7.1. Make(s) : Meiyuan

4.7.2. Type(s) : 72V

4.7.3. Photographs and/or drawings of the complete system : Refer to drawing No. HAWK-03

4.7.4. Speed range displayed : 0-99m/h

4.7.5. Tolerance of the measuring mechanism of the speedometer :

72V		
km/h	20	36
Tolerance	0~+5%	0~+6%

4.7.6. Technical constant of the speedometer : not applicable

4.7.7. Method of operation and description of the drive mechanism : Speedometer value linear changes in accordance with the motor speed

4.7.8. Overall transmission ratio of the drive mechanism : not applicable

5. Suspension

5.1. Drawing of suspension arrangement : Refer to drawing No. HAWK-04
Refer to drawing No. HAWK-05

5.1.1. Brief description of the electrical and/or electronic components used in the suspension : not applicable

5.2. Tyres (category, dimensions and maximum loading) and rims (standard type) :

	Make	Tire	Rolling circumference E.T.R.T.O.	Component Approval No.	Tire pressure [kpa]		Load index	Speed category	Rims
					Driver only	Driver and P1)			



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Front	YUANXI NG	110/70 -12	1386	E4-75R-0008850	225kpa	225kpa	47	K	12
Rear	YUANXI NG	120/70 -12	1428	E4-75R-0005677	225kpa	225kpa	51	K	12

- 5.2.1. Nominal rolling circumference : See section 5.2
5.2.2. Tyre pressures recommended by the manufacturer : See section 5.2
5.2.3. Tyre/wheel combinations : See section 5.2
5.2.4. Minimum-speed category symbol compatible with the theoretical maximum design speed of the vehicle : B
5.2.5. Minimum load-capacity index with the maximum load on each tyre : Front : 23
Rear : 50
5.2.6. Categories of use compatible for the vehicle : Normal

6. Steering

- 6.1. Steering gear and control
6.1.1. Type of gear : handle bar on telescopic fork
6.1.2. Brief description of the electrical and/or electronic components used in the steering system : not applicable

7. Braking

- 7.1. Diagram of braking devices : Refer to drawing No. HAWK-06
7.2. Front disc / drum brake ⁽¹⁾ : Front : disc
Rear disc / drum brakes ⁽¹⁾ : Rear : disc
7.2.1. Make(s) : HL
7.2.2. Type(s) : Front : ϕ 220
Rear : ϕ 220
7.3. Drawing of parts of the brake system
7.3.1. Shoes and/or pads ⁽¹⁾ : Refer to drawing No. HAWK-07
7.3.2. Linings and/or pads (Indicate make, grade of material or identification mark) ⁽¹⁾ : Refer to drawing No. HAWK-07
7.3.3. Brake levers and/or pedals ⁽¹⁾ : Refer to drawing No. HAWK-08
7.3.4. Hydraulic reservoirs (where applicable) : Refer to drawing No. HAWK-09
7.4. Other devices (where applicable)
drawing and description : not applicable
7.5. Brief description of the electrical and/or electronic components used in the braking system : not applicable

8. Lighting and light-signalling devices



Jiangsu Xinri E-Vehicle Co.,Ltd.

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- 8.1. List of all devices (mentioning the number, make(s), model, component type-approval mark(s), the maximum intensity of the main-beam headlamps, colour, the corresponding tell-tale) : List as below

Name	Make	Type	Quantity /color	Tell tale	Approval no	Max. intensity
Main-beam headlamp	XINRI	XR-LY-QD	2/ white		E11 113R-006929	22500cd
Dipped-beam headlamp		XR-LY-QD	2/ white	not applicable	E11 113R-006929	not applicable
Front position lamp		XR-LY-QD	2/white	Panel lamp	E11 50R-006929	not applicable
Front direction indicator		XR-LY-FZXD	2/ amber		E11 50R-007648	not applicable
Rear direction indicator		XR-LY-WD	2/ amber		E11 50R-007649	not applicable
Rear position lamp			1/ red	Panel lamp		not applicable
Stop Lamp			1/ red	not applicable		not applicable
Rear registration plate lamp			1/ white	Panel lamp		not applicable
Side retro-reflecting devices	DBN or K-LITE	KM-101	2 / amber	not applicable	IA E9-02.1270	not applicable
Rear retro-reflecting device	DBN or K-LITE	KM-202	1/ red	not applicable	IA E9-02.1269	not applicable

- 8.2. Diagram showing the location of the lighting and light-signalling devices : Refer to drawing No. HAWK-10
- 8.3. Hazard warning lamps (where fitted) : not applicable
- 8.4. Additional requirements relating to special vehicles : not applicable
- 8.5. Brief description of the electrical and/or electronic components used in the lighting system and in the light-signalling system : not applicable

9. Equipment

- 9.1. Coupling devices (where applicable)

- 9.1.1. Type (hook/ring/other) ⁽¹⁾ : not applicable



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9.1.2.	Photograph and/or drawings showing the position and the construction of the coupling devices	: not applicable
9.2.	Arrangement and identification of controls, tell-tales and indicators	
9.2.1.	Photographs and/or drawings of the arrangement of the symbols, controls, tell-tales and indicators	: Refer to drawing No. HAWK-11
9.3.	Statutory inscriptions	
9.3.1.	Photographs and/or drawings showing the location of the statutory inscriptions and the chassis number	: Refer to drawing No. HAWK-13
9.3.2.	Photographs and/or drawings showing the official part of the inscription (with statement of dimensions)	: Refer to drawing No. HAWK-12
9.3.3.	Photographs and/or drawings of the chassis number (with statement of dimensions)	: Refer to drawing No. HAWK-13 Refer to drawing No. HAWK-14
9.4.	Device(s) to protect against unauthorized use	
9.4.1.	Type of device(s)	: TYPE 2
9.4.2.	Summary description of device(s) used	: Steering lock Refer to drawing No. HAWK-15
9.5.	Audible warning device(s)	
9.5.1.	Summary description of device(s) used and their purpose	: Electro magnetic with resonator disc,single-tone
9.5.2.	Make(s)	: MOCC
9.5.3.	Type(s)	: DL700-34
9.5.4.	Type-approval mark	: E4-28R-000032
9.5.5.	Drawing(s) showing the location of the audible warning device(s) in relation to the structure of the vehicle	: Refer to drawing No. HAWK-16
9.5.6.	Details of the method of attachment, including the part of the vehicle structure to which the audible warning device(s) is (are) attached	: Refer to drawing No. HAWK-16
9.6.	Location of rear registration plate (indicate variants where necessary, drawings may be used as appropriate)	: Refer to drawing No. HAWK-17
9.6.1.	Inclination of plane in relation to the vertical	: 25° facing upward

Jiangsu Xinri E-Vehicle Co.,Ltd.

Information document: 2002/24-HAWK-01

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B. INFORMATION RELATING SOLELY TO TWO-WHEEL MOPEDS AND MOTORCYCLES

1. Equipment

- | | | |
|--------|--|--|
| 1.1. | Rear-view mirror(s) (please provide the following information for each rear-view mirror) | |
| 1.1.1. | Make | : Taizhou xingyuan Vehicle Components Co.,Ltd |
| 1.1.2. | Component type-approval mark | : E4-81R-000388 |
| 1.1.3. | Variant | : not applicable |
| 1.1.4. | Drawing(s) showing the location of the rear-view mirror(s) in relation to the structure of the vehicle | : Refer to drawing No. HAWK-18 |
| 1.1.5. | Precise information concerning the type of attachment, including that part of the vehicle structure to which the rear-view mirror is attached | : Refer to drawing No. HAWK-18 |
| 1.2. | Stand | |
| 1.2.1. | Type (central and/or side) | : Centre stands and Prop stands |
| 1.2.2. | Drawing showing the location of the stand(s) in relation to the structure of the vehicle | : Refer to drawing No. HAWK-19 |
| 1.3. | Attachments for motorcycle sidecars (where applicable) | |
| 1.3.1. | Photographs and/or drawings showing the location and the construction | : not applicable |
| 1.4. | Hand-hold for a passenger | |
| 1.4.1. | Type (strap and/or handle) | : handle |
| 1.4.2. | Photographs and/or drawings showing the location | : Refer to drawing No. HAWK-20 |
| 1.5. | For mopeds fitted with pedals and, if Directive 97/24/EC, Chapter 3, Annex I, point 3.5 applies, description of the measures taken in order to ensure safety | : not applicable |
| 1.6 | Design and position of the label
Referred to in Directive 97/24/EC, Chapter 7 | : Refer to drawing No. HAWK-21-1
Refer to drawing No. HAWK-21-2
Refer to drawing No. HAWK-21-3
Refer to drawing No. HAWK-21-4 |



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information document: 2002/24-HAWK-01

Application date: 11 January 2017

PART 2 SEPARATE DIRECTIVE APPROVAL NUMBERS

Heading No.	Separate Directive No.	Subject	Approval No ⁽¹⁾	Extension date	Variants and versions covered
18	95/1/EC	Maximum torque and maximum net power of engine	---	---	---
19	97/24/EC(C7)	Anti-tampering measures for mopeds and motorcycles	---	---	---
20	97/24/EC(C6)	Fule tank	---	---	---
25	95/1/EC	Maximum design speed of vehicle	---	---	---
26	93/93/EEC	Masses and dimensions	---	---	---
27	97/24/EC(C10)	Trailer coupling devices	---	---	---
28	97/24/EC(C5) 2005/30/EC	Anti-air pollution measures	---	---	---
29	97/24/EC(C1)	Tyres	Acc. to ECE R75 and Refer to 5.2 of Part 1A	---	---
31	93/14/EEC	Braking system	---	---	---
32	2009/67/EC	Installation of lighting and light-signalling devices on the vehicle	---	---	---
33	97/24/EC (C2)	Lighting and light-signalling devices	Refer to 8.1of Part 1A	---	---
34	93/30/EEC	Audible warning device	Refer to 9.5.4 of Part 1A	---	---
35	2009/62/EC	Position for the mounting of rear registration plate	---	---	---
36	97/24/EC(C8)	Electromagnetic compatibility	---	---	---
37	97/24/EC(C9)	Sound level and exhaust system	---	---	---
38	97/24/EC(C4)	Rear-view mirror(s)	Refer to 1.1.2 of Part 1B	---	---
39	97/24/EC(C3)	External projections	---	---	---
40	2009/78/EC	Stand	---	---	---
41	93/33/EEC	Devices to prevent unauthorised use of the vehicle	---	---	---
42	97/24/EC(12)	Windows; windscreens wipers; windscreens wasders; and so on	---	---	---
43	93/32/EEC	Passenger hand-hold for two-wheel vehicles	---	---	---
44	97/24EEC(C11)	Anchorage points for safety belts and safety belts	---	---	---
45	2000/7/EC	Speedometer	---	---	---
46	2009/80/EC	Identification of controls, tell -tales and indicators	---	---	---
47	2009/139/EC	Statutory inscriptions	---	---	---

Jiangsu Xinri E-Vehicle Co.,Ltd.

Information document: 2002/24-HAWK-01

Application date: 11 January 2017

To whom it may concern,

For the vehicle type: HAWK

Acc. to 97/24/EC chapter 7, annex, No. 3 .8

We here with declare, that the electric engine's maximum continuous rated power is 3000w and operating voltage is 72V. Modification or disconnection of the device or its wiring system do not have the effect of increasing the moped's maximum design speed by more than 10%.
(variant 1,2,3,4)

We here with declare, that the electric engine's maximum continuous rated power is 249w and operating voltage is 72V. Modification or disconnection of the device or its wiring system do not have the effect of increasing the moped's maximum design speed by more than 10%.
(variant 5,6,)

Acc. to 93/33/EC annex 1, No.3.6

The vehicle's key locking system incorporates more than 1000 different combinations.



Mr. Ren Yi /manager

Jiangsu Xinri E-Vehicle Co.,Ltd.



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information document: 2002/24-HAWK-01

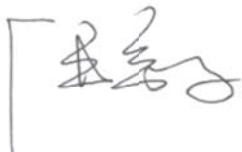
Application date: 11 January 2017

JIANGSU XINRI E-VEHICLE CO.,LTD.

Statement Concerning the Material of Brake Pad

We, JIANGSU XINRI E-VEHICLE CO.,LTD. declare that all our moped with e-mark approval which export to European market. The material of brake pad do not have the material of asbestos.

Type of vehicle	Type of front brake pad	Type of rear brake lining
HAWK	c147H7	c147H7





JIANGSU XINRI E-VEHICLE CO.,LTD.

11 January 2017

Signature / Ren yi



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information document: 2002/24-HAWK-01

Application date: 11 January 2017

Statement Concerning Authority of Signature on COC Paper

We, Jiangsu Xinri E-Vehicle Co., Ltd. declare that the undersigned, Mr. Renyi, the manager of our company, will be the authorized person to sign the COC paper of the moped.

Type: HAWK

Specification of signature of COC:



Mr. Ren Yi /manager

Jiangsu Xinri E-Vehicle Co.,Ltd.
11 January 2017



EC CERTIFICATE OF CONFORMITY

The undersigned:

Mr. Ren yi

Hereby certifies that the following vehicle:

0.1. Make(trade name of manufacturer):

XINRI,SUNRA,KRAL,YUKI,ARCHOS,
EV BLANSON,S.L.,Barton Motors,E-ROAD,
ARORA ,BIR,SOLID , LKG , ORAIO ,MULTI,
MALEK , MOTORAN ,altai ,yesilyurt , Robbo ,
Motolux,Mezz,Altmoto,Motodell,Motomz ,MPI,
ORAIO,SDR,Paradise Island EVs, Multi, MALEK,
MECBAT,Robbo, SAV distribution,MOTORAN,
VOLTA, volta, 

0.2. Type:

Variant:

Version:

0.2.1 Commercial name(s) (where appropriate):

HAWK

Variant 1 : 45km/h 3000W lead-acid batteries

00

HAWK,KAPLAN,MILLE 5000,MILLE 250,KR-57,
WOLF, Rossi3000,Rossi3500,Rossi4000,Rossi4500,
Rossi5000,Rossi5500,Alf3000,Alf3500,Alf4000,
Alf4500,Alf5000,Alf5500,Ceylan3000,Ceylan3500,
Ceylan4000,Ceylan4500,Ceylan5000,Ceylan5500,
EXECUTIVE,S5, Bravis, bravis, KAPLAN 249W,
KAPLAN249, VS8

L1e

A

0.4. Vehicle category:

0.4.1. Vehicle category according to Directive
97/24/EC,Chapter 7 (if applicable):

0.5. Name and address of the manufacturer:

0.6. Location of the statutory plate:

Vehicle identification number:

Jiangsu Xinri E-Vehicle Co.,Ltd.

No.501, Xishan Road,Anzhen Town,Xishan
District,Wuxi City,Jiangsu,P.R.China,
R, x1000, y200,z300

☆LXRBE0GW1H0901369☆

0.7. Location of the vehicle identification
number on the chassis:

R, x290, y1, z240(r/o)

Conforms in all respects to the type described in EC type-approval

— EC type-approval number: e11*2002/24*1969***01**

—dated: DD MM YYYY

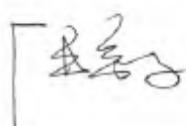
The vehicle can be permanently registered without requiring any further approvals, for driving on the right/left
and for using metric/imperial units for the speedometer.

Wuxi City, Jiangsu Province, PR.China

DD MM YYYY

(place)

(date)



director

(signature)

(position)



ADDITIONAL INFORMATION

1.	Number of axles:	2	and wheels:	2	
3.	Wheel base:	1325			mm
6.1	Length:	1850			mm
7.1	Width:	710			mm
8.	Height:	1100			mm
12.1.	Mass of the vehicle (with bodywork) in running order:	126			kg
12.2.	Unladen mass of the vehicle:	126			kg
14.1.	Technically permissible maximum laden mass:	276			kg
14.2	Distribution of this mass among the axles:				
1.	86	kg	2.	190	kg
14.3.	Technically permissible mass on each axle:				
1.	86	kg.	2.	190	kg
17.	Maximum mass of trailer: (braked): ---	kg	(unbraked): ---		kg
19.1.	Maximum vertical load at the coupling point for a trailer:	---			kg
20.	Engine manufacturer:	Taizhou SINE motor Technology Co., Ltd			kg
21.	Engine type as marked on the engine:	XR3000W72V			
21.2.	Engine number:	XR3000W72V1750001			
22.	Working principle:	Electric			
23.	Number and arrangement of cylinders:		---		
24.	Cylinder capacity:	---			cm ³
25.	Fuel:	---			
26.	Maximum net power or maximum continuous rated power as applicable:				
	3	KW	at	---	min ⁻¹
26.1.	Ratio: maximum net power or maximum continuous rated power/mass of the vehicle in running order:		0.024		(kw/kg)
28.	Gearbox (type):	---			
29.	Gear ratios:	---			
32.	Tyre size designation:				
	Axle 1: 110/70-12		Axle 2:	120/70-12	
37.	Body: yes/no				
41.	Number and configuration of doors :	not applicable			
42.1.	Number and position of seats:	2 r1:1c r2:1c			
43.1.	Approval mark of coupling device, if fitted:	not applicable			
44.	Maximum speed:	45			km/h
45.	Sound level : 97/24/EC chapter 9 as amended by 2009/108/EC				
	Stationary: ---	dB(A)	at engine speed: ---		min ⁻¹
	Drive-by: ---	dB(A)			
46.	Exhaust emissions: 97/24/EC chapter 5 Annex I, as amended by 2009/108/EC				
	Type I : CO : ---	g/km	HC: ---		g/km
	NO _x : ---	g/km	HC+ NO _x : ---		g/km
	Type II: for mopeds: CO : ---	g/min	HC: ---		
	Visible air pollution caused by an engine with compression ignition: — corrected value of adsorption coefficient : ---				m ⁻¹
47.	Fiscal power or national code number (s) :				
	Italy :	France :	Spain :		
	Belgium :	Germany :	Luxembourg :		
	Denmark :	Netherlands :	Greece :		
	United kingdom :	Ireland :	Portugal :		
	Austria :	Sweden :	Finland :		
	Czech Republic :	Estonia :	Cyprus :		
	Latvia :	Lithuania :	Hungary :		
	Malta :	Poland :	Slovenia :		
	Slovakia	Romania	Bulgaria		
	Croatia				
50.	Remarks : ---				
51.	Exemptions : ---				



EC CERTIFICATE OF CONFORMITY

The undersigned:

Mr. Ren yi

Hereby certifies that the following vehicle:

0.1. Make(trade name of manufacturer):

XINRI,SUNRA,KRAL,YUKI,ARCHOS,
EV BLANSON,S.L.,Barton Motors,E-ROAD,
ARORA ,BIR,SOLID , LKG , ORAIO ,MULTI,
MALEK , MOTORAN ,altai ,yesilyurt , Robbo ,
Motolux,Mezz,Altmoto,Motodell,Motomz ,MPI,
ORAIO,SDR,Paradise Island EVs, Multi, MALEK,
MECBAT,Robbo, SAV distribution,MOTORAN,
VOLTA, volta, 

0.2. Type:

Variant:

Version:

0.2.1 Commercial name(s) (where appropriate):

HAWK

Variant 2 : 25km/h 3000W lead-acid batteries

00

HAWK,KAPLAN,MILLE 5000,MILLE 250,KR-57,
WOLF, Rossi3000,Rossi3500,Rossi4000,Rossi4500,
Rossi5000,Rossi5500,Alf3000,Alf3500,Alf4000,
Alf4500,Alf5000,Alf5500,Ceylan3000,Ceylan3500,
Ceylan4000,Ceylan4500,Ceylan5000,Ceylan5500,
EXECUTIVE,S5, **Bravis, bravis, KAPLAN 249W,**
KAPLAN249, VS8

0.4. Vehicle category:

L1e

0.4.1. Vehicle category according to Directive
97/24/EC,Chapter 7 (if applicable):

A

0.5. Name and address of the manufacturer:

Jiangsu Xinri E-Vehicle Co.,Ltd.
No.501, Xishan Road,Anzhen Town,Xishan
District,Wuxi City,Jiangsu,P.R.China,
R, x 1000, y 200,z 300

0.6. Location of the statutory plate:

Vehicle identification number:

☆LXRBE0GX4H0900001☆

0.7. Location of the vehicle identification
number on the chassis:

R, x290, y1, z240(r/o)

Conforms in all respects to the type described in EC type-approval

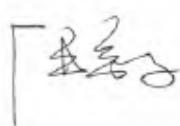
— EC type-approval number: e11*2002/24*1969***01**

—dated: DD MM YYYY

The vehicle can be permanently registered without requiring any further approvals, for driving on the right/left and for using metric/imperial units for the speedometer.

Wuxi City, Jiangsu Province, PR.China
(place)

DD MM YYYY
(date)



(signature)

director

(position)



ADDITIONAL INFORMATION

1.	Number of axles:	2	and wheels:	2	
3.	Wheel base:	1325			mm
6.1	Length:	1850			mm
7.1	Width:	710			mm
8.	Height:	1100			mm
12.1.	Mass of the vehicle (with bodywork) in running order:	126			kg
12.2.	Unladen mass of the vehicle:	126			kg
14.1.	Technically permissible maximum laden mass:	276			kg
14.2	Distribution of this mass among the axles:				
1.	86	kg	2.	190	kg
14.3.	Technically permissible mass on each axle:				
1.	86	kg.	2.	190	kg
17.	Maximum mass of trailer: (braked): ---	kg	(unbraked): ---		kg
19.1.	Maximum vertical load at the coupling point for a trailer:	---			kg
20.	Engine manufacturer:	Taizhou SINE motor Technology Co., Ltd			kg
21.	Engine type as marked on the engine:	XR3000W72V			
21.2.	Engine number:	XR3000W72V1750002			
22.	Working principle:	Electric			
23.	Number and arrangement of cylinders:		---		
24.	Cylinder capacity:	---			cm ³
25.	Fuel:	---			
26.	Maximum net power or maximum continuous rated power as applicable:				
	3	KW	at	---	min ⁻¹
26.1.	Ratio: maximum net power or maximum continuous rated power/mass of the vehicle in running order:		0.024		(kw/kg)
28.	Gearbox (type):	---			
29.	Gear ratios:	---			
32.	Tyre size designation:				
	Axle 1:	110/70-12	Axle 2:	120/70-12	
37.	Body: yes/no				
41.	Number and configuration of doors :	not applicable			
42.1.	Number and position of seats:	2 r1:1c r2:1c			
43.1.	Approval mark of coupling device, if fitted:	not applicable			
44.	Maximum speed:	25			km/h
45.	Sound level : 97/24/EC chapter 9 as amended by 2009/108/EC				
	Stationary: ---	dB(A)	at engine speed: ---		min ⁻¹
	Drive-by: ---	dB(A)			
46.	Exhaust emissions: 97/24/EC chapter 5 Annex I, as amended by 2009/108/EC				
	Type I : CO : ---	g/km	HC: ---		g/km
	NO _x : ---	g/km	HC+ NO _x : ---		g/km
	Type II: for mopeds: CO : ---	g/min	HC: ---		
	Visible air pollution caused by an engine with compression ignition: — corrected value of adsorption coefficient : ---				m ⁻¹
47.	Fiscal power or national code number (s) :				
	Italy :	France :	Spain :		
	Belgium :	Germany :	Luxembourg :		
	Denmark :	Netherlands :	Greece :		
	United kingdom :	Ireland :	Portugal :		
	Austria :	Sweden :	Finland :		
	Czech Republic :	Estonia :	Cyprus :		
	Latvia :	Lithuania :	Hungary :		
	Malta :	Poland :	Slovenia :		
	Slovakia	Romania	Bulgaria		
	Croatia				
50.	Remarks : ---				
51.	Exemptions : ---				



EC CERTIFICATE OF CONFORMITY

The undersigned:

Mr. Ren yi

Hereby certifies that the following vehicle:

0.1. Make(trade name of manufacturer):

XINRI,SUNRA,KRAL,YUKI,ARCHOS,
EV BLANSON,S.L.,Barton Motors,E-ROAD,
ARORA ,BIR,SOLID , LKG , ORAIO ,MULTI,
MALEK , MOTORAN ,altai ,yesilyurt , Robbo ,
Motolux,Mezz,Alt Moto,Motodell,Motomz ,MPI,
ORAIO,SDR,Paradise Island EVs, Multi, MALEK,
MECBAT,Robbo,SAV distribution,MOTORAN,
VOLTA, volta, 

0.2. Type:

Variant:

Version:

0.2.1 Commercial name(s) (where appropriate):

HAWK

Variant 3 : 45km/h 3000W lithium battery

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HAWK,KAPLAN,MILLE 5000,MILLE 250,KR-57,
WOLF, Rossi3000,Rossi3500,Rossi4000,Rossi4500,
Rossi5000,Rossi5500,Alf3000,Alf3500,Alf4000,
Alf4500,Alf5000,Alf5500,Ceylan3000,Ceylan3500,
Ceylan4000,Ceylan4500,Ceylan5000,Ceylan5500,
EXECUTIVE,S5 , Bravis, bravis, KAPLAN 249W,
KAPLAN249, VS8

0.4. Vehicle category:

L1e

0.4.1. Vehicle category according to Directive
97/24/EC,Chapter 7 (if applicable):

A

0.5. Name and address of the manufacturer:

Jiangsu Xinri E-Vehicle Co.,Ltd.
No.501, Xishan Road, Anzhen Town, Xishan
District, Wuxi City, Jiangsu, P.R.China,
R, x 1000, y 200, z 300

0.6. Location of the statutory plate:

Vehicle identification number:

☆LXRBE0GY3H0900001☆

0.7. Location of the vehicle identification
number on the chassis:

R, x290, y1, z240(r/o)

Conforms in all respects to the type described in EC type-approval

— EC type-approval number: e11*2002/24*1969***01**

—dated: DD MM YYYY

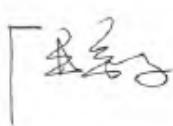
The vehicle can be permanently registered without requiring any further approvals, for driving on the right/left and for using metric/imperial units for the speedometer.

Wuxi City, Jiangsu Province, PR.China

DD MM YYYY

(place)

(date)



director

(signature)

(position)



ADDITIONAL INFORMATION

1.	Number of axles:	2	and wheels:	2	
3.	Wheel base:	1325			mm
6.1	Length:	1850			mm
7.1	Width:	710			mm
8.	Height:	1100			mm
12.1.	Mass of the vehicle (with bodywork) in running order:	94			kg
12.2.	Unladen mass of the vehicle:	94			kg
14.1.	Technically permissible maximum laden mass:	244			kg
14.2	Distribution of this mass among the axles:				
1.	76	kg	2.	168	kg
14.3.	Technically permissible mass on each axle:				
1.	86	kg.	2.	190	kg
17.	Maximum mass of trailer: (braked): ---	kg	(unbraked): ---		kg
19.1.	Maximum vertical load at the coupling point for a trailer:	---			kg
20.	Engine manufacturer:	Taizhou SINE motor Technology Co., Ltd			
21.	Engine type as marked on the engine:	XR3000W72V			
21.2.	Engine number:	XR3000W72V1750003			
22.	Working principle:	Electric			
23.	Number and arrangement of cylinders:		---		
24.	Cylinder capacity:	---			cm ³
25.	Fuel:	---			
26.	Maximum net power or maximum continuous rated power as applicable:				
	3	KW	at	---	min ⁻¹
26.1.	Ratio: maximum net power or maximum continuous rated power/mass of the vehicle in running order:		0.032		(kw/kg)
28.	Gearbox (type):	---			
29.	Gear ratios:	---			
32.	Tyre size designation:				
	Axle 1:	110/70-12	Axle 2:	120/70-12	
37.	Body: yes/no				
41.	Number and configuration of doors :	not applicable			
42.1.	Number and position of seats:	2 r1:1c r2:1c			
43.1.	Approval mark of coupling device, if fitted:	not applicable			
44.	Maximum speed:	45			km/h
45.	Sound level : 97/24/EC chapter 9 as amended by 2009/108/EC				
	Stationary: ---	dB(A)	at engine speed: ---		min ⁻¹
	Drive-by: ---	dB(A)			
46.	Exhaust emissions: 97/24/EC chapter 5 Annex I, as amended by 2009/108/EC				
	Type I : CO : ---	g/km	HC: ---		g/km
	NO _x : ---	g/km	HC+ NO _x : ---		g/km
	Type II: for mopeds: CO : ---	g/min	HC: ---		
	Visible air pollution caused by an engine with compression ignition: — corrected value of adsorption coefficient : ---				m ⁻¹
47.	Fiscal power or national code number (s) :				
	Italy :	France :	Spain :		
	Belgium :	Germany :	Luxembourg :		
	Denmark :	Netherlands :	Greece :		
	United kingdom :	Ireland :	Portugal :		
	Austria :	Sweden :	Finland :		
	Czech Republic :	Estonia :	Cyprus :		
	Latvia :	Lithuania :	Hungary :		
	Malta :	Poland :	Slovenia :		
	Slovakia	Romania	Bulgaria		
	Croatia				
50.	Remarks : ---				
51.	Exemptions : ---				



EC CERTIFICATE OF CONFORMITY

The undersigned:

Mr. Ren yi

Hereby certifies that the following vehicle:

0.1. Make(trade name of manufacturer):

XINRI,SUNRA,KRAL,YUKI,ARCHOS,
EV BLANSON,S.L.,Barton Motors,E-ROAD,
ARORA ,BIR,SOLID , LKG , ORAIO ,MULTI,
MALEK , MOTORAN ,altai ,yesilyurt , Robbo ,
Motolux,Mezz,Alt Moto,Motodell,Motomz ,MPI,
ORAIO,SDR,Paradise Island EVs, Multi, MALEK,
MECBAT,Robbo,SAV distribution,MOTORAN,
VOLTA, volta, 

0.2. Type:

Variant:

Version:

0.2.1 Commercial name(s) (where appropriate):

HAWK

Variant 4 : 25km/h 3000W lithium battery

00

HAWK,KAPLAN,MILLE 5000,MILLE 250,KR-57,
WOLF, Rossi3000,Rossi3500,Rossi4000,Rossi4500,
Rossi5000,Rossi5500,Alf3000,Alf3500,Alf4000,
Alf4500,Alf5000,Alf5500,Ceylan3000,Ceylan3500,
Ceylan4000,Ceylan4500,Ceylan5000,Ceylan5500,
EXECUTIVE,S5, **Bravis, bravis, KAPLAN 249W,**
KAPLAN249, VS8

0.4. Vehicle category:

L1e

0.4.1. Vehicle category according to Directive
97/24/EC,Chapter 7 (if applicable):

A

0.5. Name and address of the manufacturer:

Jiangsu Xinri E-Vehicle Co.,Ltd.
No.501, Xishan Road, Anzhen Town, Xishan
District, Wuxi City, Jiangsu, P.R.China,
R, x 1000, y 200, z 300

0.6. Location of the statutory plate:

Vehicle identification number:

☆LXRBE0GZ2H0900001☆

0.7. Location of the vehicle identification
number on the chassis:

R, x290, y1, z240(r/o)

Conforms in all respects to the type described in EC type-approval

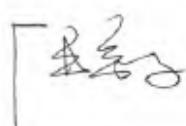
— EC type-approval number: e11*2002/24*1969***01**

—dated: DD MM YYYY

The vehicle can be permanently registered without requiring any further approvals, for driving on the right/left and for using metric/imperial units for the speedometer.

Wuxi City, Jiangsu Province, PR.China
(place)

DD MM YYYY
(date)



(signature)

director

(position)



ADDITIONAL INFORMATION

1.	Number of axles:	2	and wheels:	2	
3.	Wheel base:	1325			mm
6.1	Length:	1850			mm
7.1	Width:	710			mm
8.	Height:	1100			mm
12.1.	Mass of the vehicle (with bodywork) in running order:	94			kg
12.2.	Unladen mass of the vehicle:	94			kg
14.1.	Technically permissible maximum laden mass:	244			kg
14.2	Distribution of this mass among the axles:				
1.	76	kg	2.	168	kg
14.3.	Technically permissible mass on each axle:				
1.	86	kg.	2.	190	kg
17.	Maximum mass of trailer: (braked): ---	kg	(unbraked):---		kg
19.1.	Maximum vertical load at the coupling point for a trailer:	---			kg
20.	Engine manufacturer:	Taizhou SINE motor Technology Co., Ltd			kg
21.	Engine type as marked on the engine:	XR3000W72V			
21.2.	Engine number:	XR3000W72V1750004			
22.	Working principle:	Electric			
23.	Number and arrangement of cylinders:		---		
24.	Cylinder capacity:	---			cm ³
25.	Fuel:	---			
26.	Maximum net power or maximum continuous rated power as applicable:				
	3	KW	at	---	min ⁻¹
26.1.	Ratio: maximum net power or maximum continuous rated power/mass of the vehicle in running order:		0.032		(kw/kg)
28.	Gearbox (type):	---			
29.	Gear ratios:	---			
32.	Tyre size designation:				
	Axle 1:	110/70-12	Axle 2:	120/70-12	
37.	Body: yes/no				
41.	Number and configuration of doors :	not applicable			
42.1.	Number and position of seats:	2 r1:1c r2:1c			
43.1.	Approval mark of coupling device, if fitted:	not applicable			
44.	Maximum speed:	25			km/h
45.	Sound level : 97/24/EC chapter 9 as amended by 2009/108/EC				
	Stationary: ---	dB(A)	at engine speed: ---		min ⁻¹
	Drive-by: ---	dB(A)			
46.	Exhaust emissions: 97/24/EC chapter 5 Annex I, as amended by 2009/108/EC				
	Type I : CO : ---	g/km	HC: ---		g/km
	NO _x : ---	g/km	HC+ NO _x : ---		g/km
	Type II: for mopeds: CO : ---	g/min	HC: ---		
	Visible air pollution caused by an engine with compression ignition: — corrected value of adsorption coefficient : ---				m ⁻¹
47.	Fiscal power or national code number (s) :				
	Italy :	France :	Spain :		
	Belgium :	Germany :	Luxembourg :		
	Denmark :	Netherlands :	Greece :		
	United Kingdom :	Ireland :	Portugal :		
	Austria :	Sweden :	Finland :		
	Czech Republic :	Estonia :	Cyprus :		
	Latvia :	Lithuania :	Hungary :		
	Malta :	Poland :	Slovenia :		
	Slovakia	Romania	Bulgaria		
	Croatia				
50.	Remarks : ---				
51.	Exemptions : ---				

EC CERTIFICATE OF CONFORMITY

The undersigned:

Mr. Ren yi

Hereby certifies that the following vehicle:

0.1. Make(trade name of manufacturer):

XINRI,SUNRA,KRAL,YUKI,ARCHOS,
EV BLANSON,S.L.,Barton Motors,E-ROAD,
ARORA ,BIR,SOLID , LKG , ORAIO ,MULTI,
MALEK , MOTORAN ,altai ,yesilyurt , Robbo ,
Motolux,Mezz,Alt Moto,Motodell,Motomz ,MPI,
ORAIO,SDR,Paradise Island EVs, Multi, MALEK,
MECBAT,Robbo,SAV distribution,MOTORAN,
VOLTA, volta, 

0.2. Type:

Variant:

HAWK

Version:

Variant 5 : 40km/h 249W lead-acid batteries

00

0.2.1 Commercial name(s) (where appropriate):

HAWK,KAPLAN,MILLE 5000,MILLE 250,KR-57,
WOLF, Rossi3000,Rossi3500,Rossi4000,Rossi4500,
Rossi5000,Rossi5500,Alf3000,Alf3500,Alf4000,
Alf4500,Alf5000,Alf5500,Ceylan3000,Ceylan3500,
Ceylan4000,Ceylan4500,Ceylan5000,Ceylan5500,
EXECUTIVE,S5, Bravis, bravis, KAPLAN 249W,
KAPLAN249, VS8

0.4. Vehicle category:

L1e

0.4.1. Vehicle category according to Directive
97/24/EC,Chapter 7 (if applicable):

A

0.5. Name and address of the manufacturer:

Jiangsu Xinri E-Vehicle Co.,Ltd.
No.501, Xishan Road, Anzhen Town, Xishan
District, Wuxi City, Jiangsu, P.R.China,
R, x1000, y200, z300

0.6. Location of the statutory plate:

Vehicle identification number:

☆LXRBA0GW4H0900101☆

0.7. Location of the vehicle identification
number on the chassis:

R, x290, y1, z240(r/o)

Conforms in all respects to the type described in EC type-approval

— EC type-approval number: e11*2002/24*1969***01**

—dated: DD MM YYYY

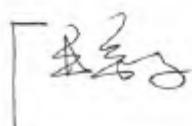
The vehicle can be permanently registered without requiring any further approvals, for driving on the right/left and for using metric/imperial units for the speedometer.

Wuxi City, Jiangsu Province, PR.China

DD MM YYYY

(place)

(date)



(signature)

director

(position)



ADDITIONAL INFORMATION

1.	Number of axles:	2	and wheels:	2	
3.	Wheel base:	1325			mm
6.1	Length:	1850			mm
7.1	Width:	710			mm
8.	Height:	1100			mm
12.1.	Mass of the vehicle (with bodywork) in running order:	126			kg
12.2.	Unladen mass of the vehicle:	126			kg
14.1.	Technically permissible maximum laden mass:	276			kg
14.2	Distribution of this mass among the axles:				
1.	86	kg	2.	190	kg
14.3.	Technically permissible mass on each axle:				
1.	86	kg.	2.	190	kg
17.	Maximum mass of trailer: (braked): ---	kg	(unbraked): ---		kg
19.1.	Maximum vertical load at the coupling point for a trailer:	---			kg
20.	Engine manufacturer:	Taizhou SINE motor Technology Co., Ltd			
21.	Engine type as marked on the engine:	XR24972V			
21.2.	Engine number:	XR24972V17500001			
22.	Working principle:	Electric			
23.	Number and arrangement of cylinders:		---		
24.	Cylinder capacity:	---			cm ³
25.	Fuel:	---			
26.	Maximum net power or maximum continuous rated power as applicable:				
	0.249	KW	at	---	min ⁻¹
26.1.	Ratio: maximum net power or maximum continuous rated power/mass of the vehicle in running order:		0.002		(kw/kg)
28.	Gearbox (type):	---			
29.	Gear ratios:	---			
32.	Tyre size designation:				
	Axle 1: 110/70-12		Axle 2:	120/70-12	
37.	Body: yes/no				
41.	Number and configuration of doors :	not applicable			
42.1.	Number and position of seats:	2 r1:1c r2:1c			
43.1.	Approval mark of coupling device, if fitted:	not applicable			
44.	Maximum speed:	40			km/h
45.	Sound level : 97/24/EC chapter 9 as amended by 2009/108/EC				
	Stationary: ---	dB(A)	at engine speed: ---		min ⁻¹
	Drive-by: ---	dB(A)			
46.	Exhaust emissions: 97/24/EC chapter 5 Annex I, as amended by 2009/108/EC				
	Type I : CO : ---	g/km	HC: ---		g/km
	NO _x : ---	g/km	HC+ NO _x : ---		g/km
	Type II: for mopeds: CO : ---	g/min	HC: ---		
	Visible air pollution caused by an engine with compression ignition: — corrected value of adsorption coefficient : ---				m ⁻¹
47.	Fiscal power or national code number (s) :				
	Italy :	France :	Spain :		
	Belgium :	Germany :	Luxembourg :		
	Denmark :	Netherlands :	Greece :		
	United kingdom :	Ireland :	Portugal :		
	Austria :	Sweden :	Finland :		
	Czech Republic :	Estonia :	Cyprus :		
	Latvia :	Lithuania :	Hungary :		
	Malta :	Poland :	Slovenia :		
	Slovakia	Romania	Bulgaria		
	Croatia				
50.	Remarks : ---				
51.	Exemptions : ---				



EC CERTIFICATE OF CONFORMITY

The undersigned:

Mr. Ren yi

Hereby certifies that the following vehicle:

0.1. Make(trade name of manufacturer):

XINRI,SUNRA,KRAL,YUKI,ARCHOS,
EV BLANSON,S.L.,Barton Motors,E-ROAD,
ARORA ,BIR,SOLID , LKG , ORAIO ,MULTI,
MALEK , MOTORAN ,altai ,yesilyurt , Robbo ,
Motolux,Mezz,Altmoto,Motodell,Motomz ,MPI,
ORAIO,SDR,Paradise Island EVs, Multi, MALEK,
MECBAT,Robbo,[SAV distribution](#),MOTORAN,
VOLTA, volta, 

0.2. Type:

Variant:

Version:

0.2.1 Commercial name(s) (where appropriate):

HAWK

Variant 6 : 25km/h 249W lead-acid batteries

00

HAWK,KAPLAN,MILLE 5000,MILLE 250,KR-57,
WOLF, Rossi3000,Rossi3500,Rossi4000,Rossi4500,
Rossi5000,Rossi5500,Alf3000,Alf3500,Alf4000,
Alf4500,Alf5000,Alf5500,Ceylan3000,Ceylan3500,
Ceylan4000,Ceylan4500,Ceylan5000,Ceylan5500,
EXECUTIVE,S5,[Bravis, bravis, KAPLAN 249W,](#)
KAPLAN249, VS8

0.4. Vehicle category:

L1e

0.4.1. Vehicle category according to Directive
97/24/EC,Chapter 7 (if applicable):

A

0.5. Name and address of the manufacturer:

Jiangsu Xinri E-Vehicle Co.,Ltd.
No.501, Xishan Road,Anzhen Town,Xishan
District,Wuxi City,Jiangsu,P.R.China,
R, x 1000, y 200,z 300

0.6. Location of the statutory plate:

Vehicle identification number:

☆LXRBA0GX0H0900001☆

0.7. Location of the vehicle identification
number on the chassis:

R, x290, y1, z240(r/o)

Conforms in all respects to the type described in EC type-approval

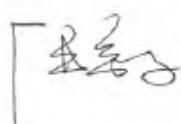
— EC type-approval number: e11*2002/24*1969***01**

—dated: DD MM YYYY

The vehicle can be permanently registered without requiring any further approvals, for driving on the right/left and for using metric/imperial units for the speedometer.

Wuxi City, Jiangsu Province, PR.China
(place)

DD MM YYYY
(date)



(signature)

director

(position)



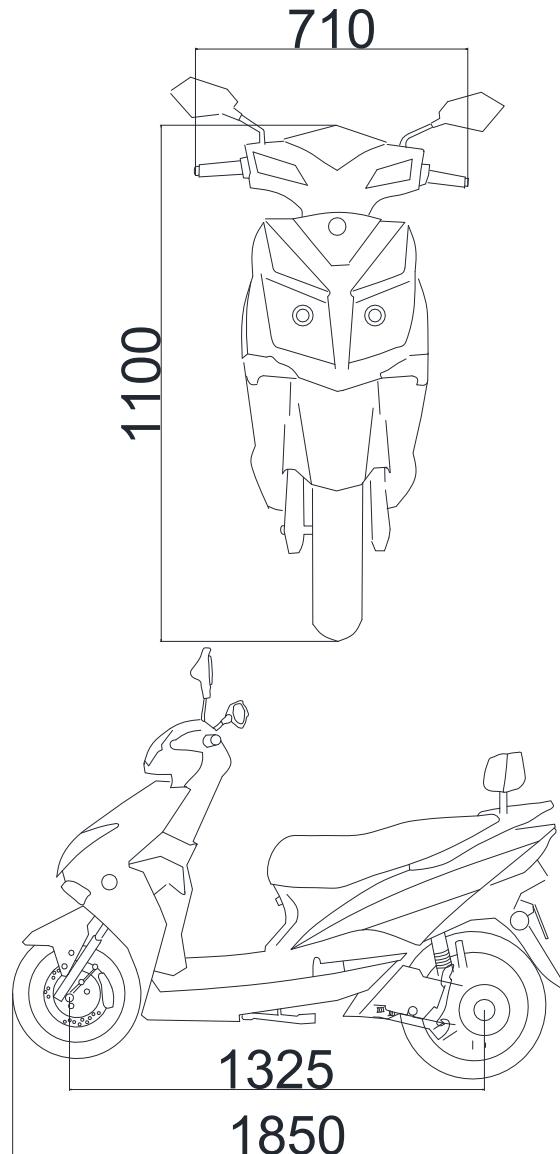
ADDITIONAL INFORMATION

1.	Number of axles:	2	and wheels:	2	
3.	Wheel base:	1325			mm
6.1	Length:	1850			mm
7.1	Width:	710			mm
8.	Height:	1100			mm
12.1.	Mass of the vehicle (with bodywork) in running order:	126			kg
12.2.	Unladen mass of the vehicle:	126			kg
14.1.	Technically permissible maximum laden mass:	276			kg
14.2	Distribution of this mass among the axles:				
1.	86	kg	2.	190	kg
14.3.	Technically permissible mass on each axle:				
1.	86	kg.	2.	190	kg
17.	Maximum mass of trailer: (braked): ---	kg	(unbraked): ---		kg
19.1.	Maximum vertical load at the coupling point for a trailer:	---			kg
20.	Engine manufacturer:	Taizhou SINE motor Technology Co., Ltd			
21.	Engine type as marked on the engine:	XR24972V			
21.2.	Engine number:	XR24972V17500002			
22.	Working principle:	Electric			
23.	Number and arrangement of cylinders:		---		
24.	Cylinder capacity:	---			cm ³
25.	Fuel:	---			
26.	Maximum net power or maximum continuous rated power as applicable:				
	0.249	KW	at	---	min ⁻¹
26.1.	Ratio: maximum net power or maximum continuous rated power/mass of the vehicle in running order:		0.002		(kw/kg)
28.	Gearbox (type):	---			
29.	Gear ratios:	---			
32.	Tyre size designation:				
	Axle 1: 110/70-12		Axle 2:	120/70-12	
37.	Body: yes/no				
41.	Number and configuration of doors :	not applicable			
42.1.	Number and position of seats:	2 r1:1c r2:1c			
43.1.	Approval mark of coupling device, if fitted:	not applicable			
44.	Maximum speed:	25			km/h
45.	Sound level : 97/24/EC chapter 9 as amended by 2009/108/EC				
	Stationary: ---	dB(A)	at engine speed: ---		min ⁻¹
	Drive-by: ---	dB(A)			
46.	Exhaust emissions: 97/24/EC chapter 5 Annex I, as amended by 2009/108/EC				
	Type I : CO : ---	g/km	HC: ---		g/km
	NO _x : ---	g/km	HC+ NO _x : ---		g/km
	Type II: for mopeds: CO : ---	g/min	HC: ---		
	Visible air pollution caused by an engine with compression ignition: — corrected value of adsorption coefficient : ---				m ⁻¹
47.	Fiscal power or national code number (s) :				
	Italy :	France :	Spain :		
	Belgium :	Germany :	Luxembourg :		
	Denmark :	Netherlands :	Greece :		
	United kingdom :	Ireland :	Portugal :		
	Austria :	Sweden :	Finland :		
	Czech Republic :	Estonia :	Cyprus :		
	Latvia :	Lithuania :	Hungary :		
	Malta :	Poland :	Slovenia :		
	Slovakia	Romania	Bulgaria		
	Croatia				
50.	Remarks : ---				
51.	Exemptions : ---				



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00
Application date: 28 November 2016



Vehicle Type	HAWK
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Complete vehicle-dimension

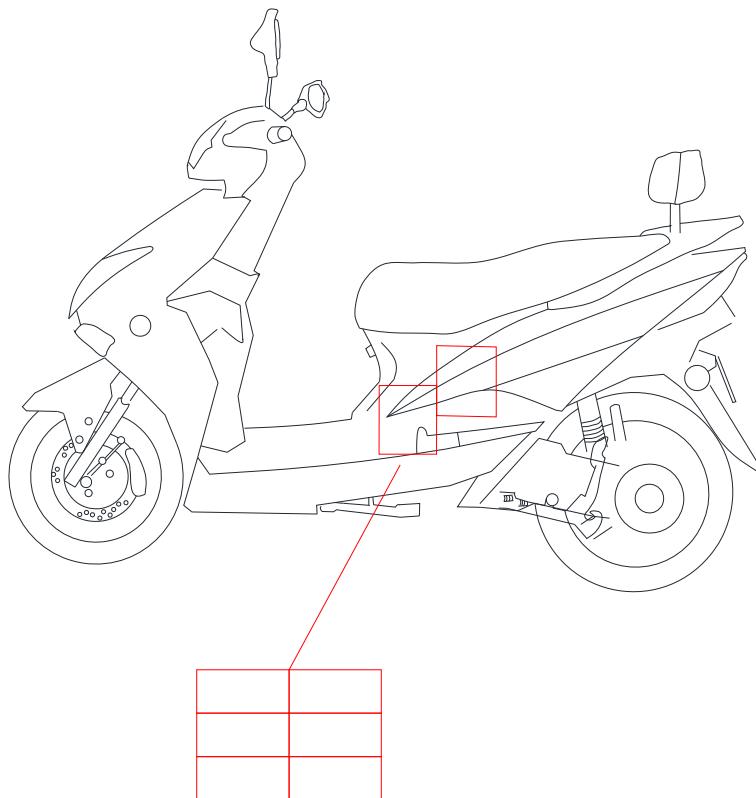
Drawing No.	HAWK-01
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Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016



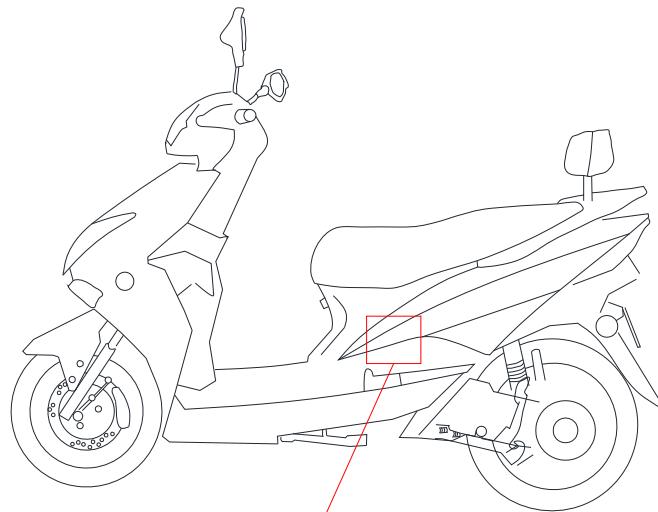
Variant 1,2,**5,6**

Vehicle Type	HAWK
Battery installation	
Drawing No.	HAWK-02



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00
Application date: 28 November 2016



Lithium battery

Variant 3,4

Vehicle Type	HAWK
Battery installation(1)	
Drawing No.	HAWK-02-1

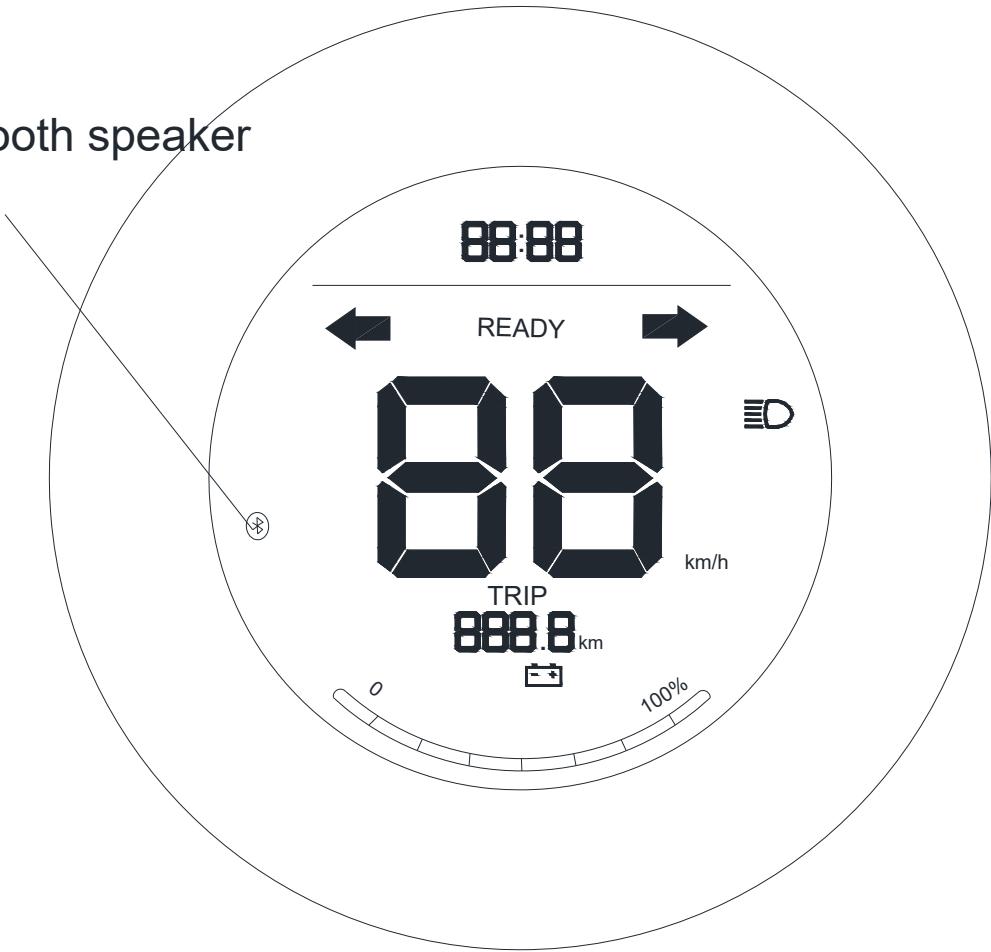


Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016

Bluetooth speaker

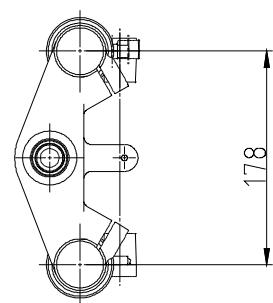
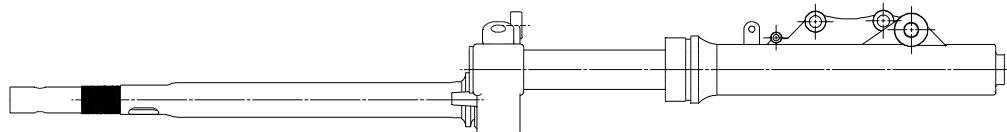
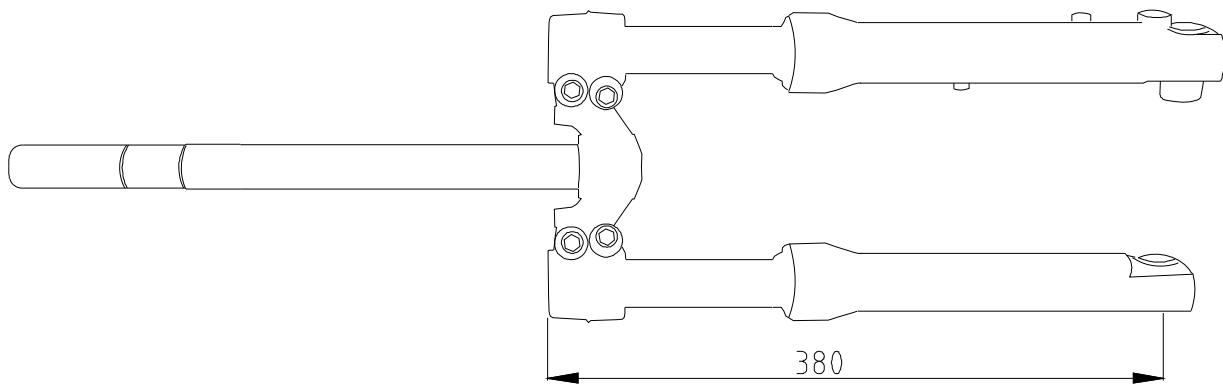


Vehicle Type	HAWK
Speedometer	
Drawing No.	HAWK-03



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00
Application date: 28 November 2016



Vehicle Type	HAWK
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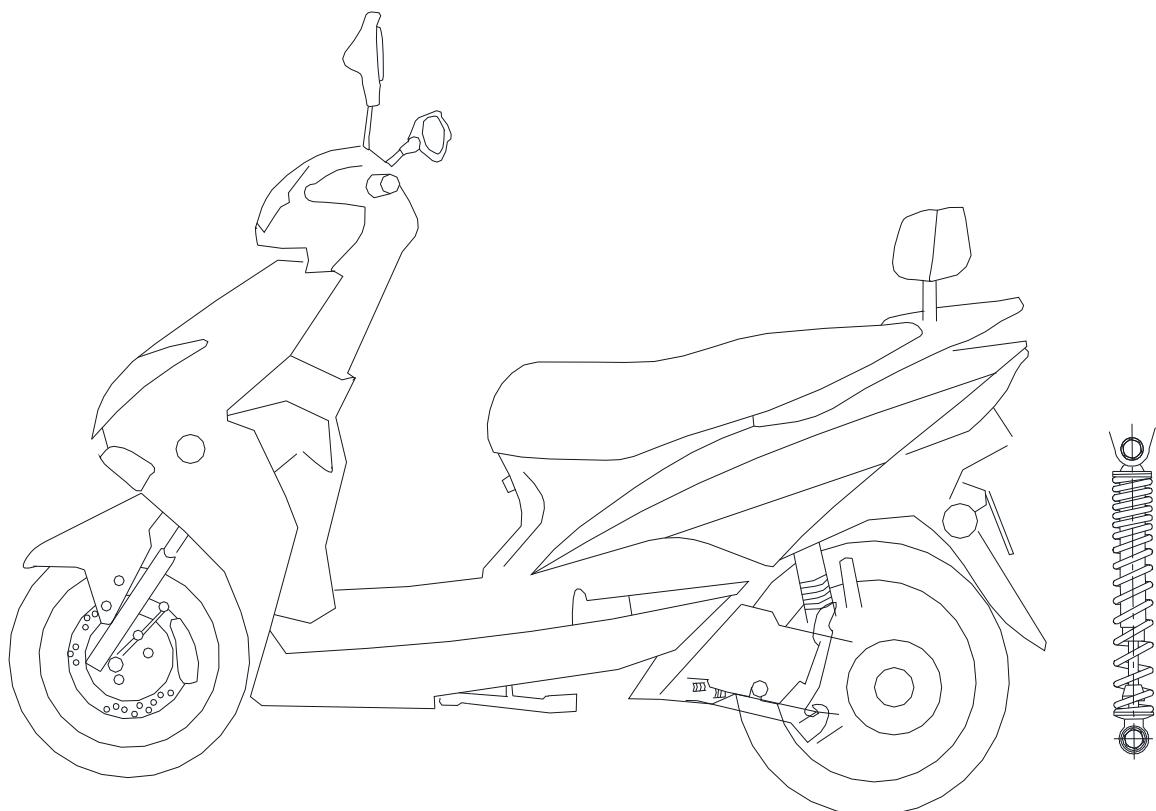
Front fork suspension

Drawing No.	HAWK-04
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Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00
Application date: 28 November 2016



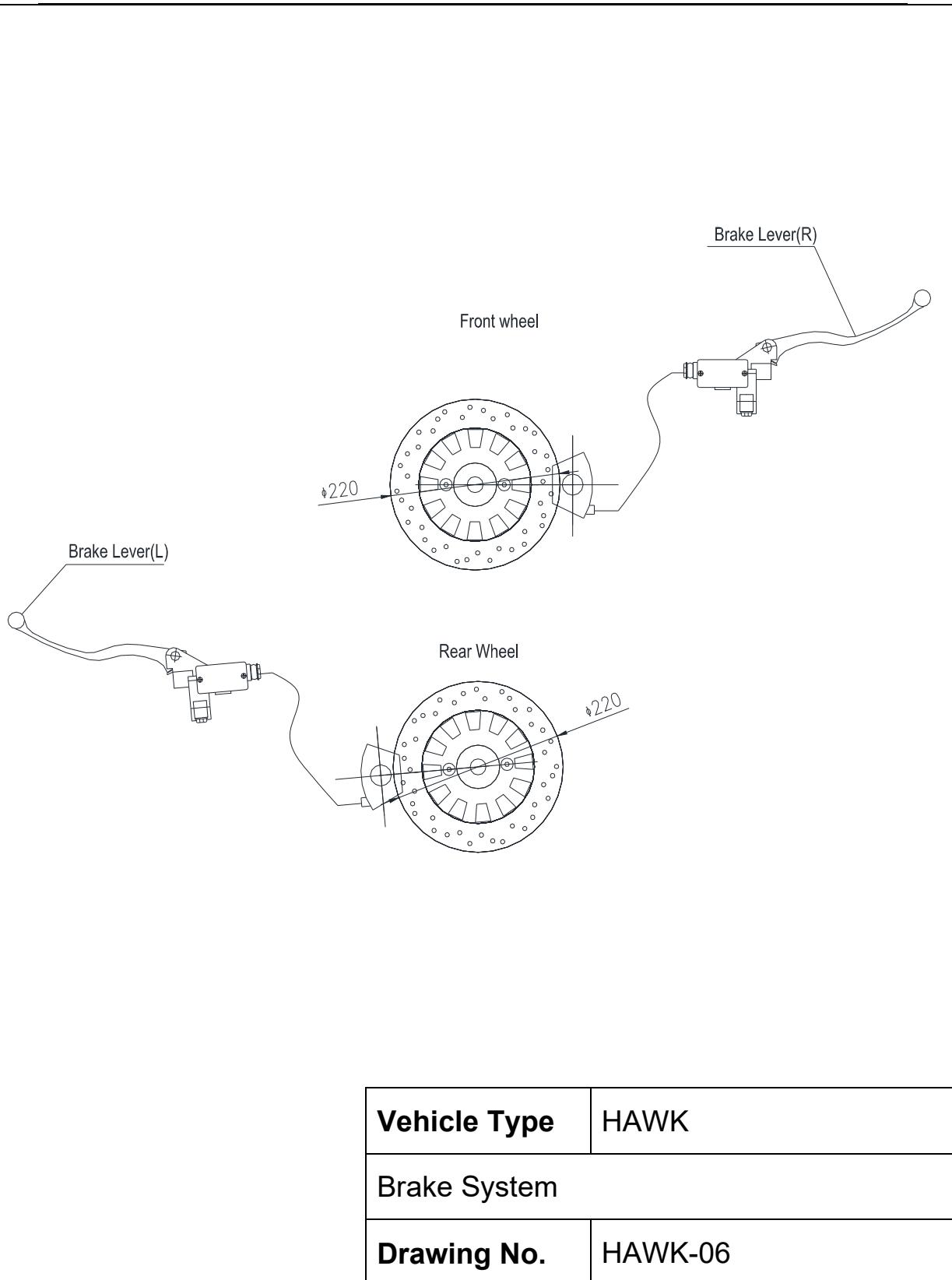
Vehicle Type	HAWK
Rear Suspension	
Drawing No.	HAWK-05



Jiangsu Xinri E-Vehicle Co.,Ltd.

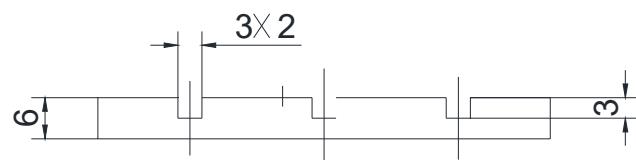
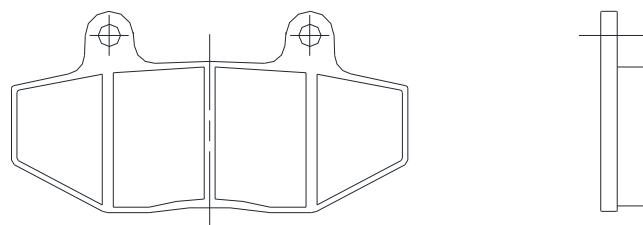
Information Document.:2002/24- HAWK -00

Application date: 28 November 2016



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00
Application date: 28 November 2016



Make: Zhejiang Lamda Brake Pads Co.,Ltd

Type: c147H7

Materials: asbestos free

Vehicle Type	HAWK
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Brake Pads Assy.

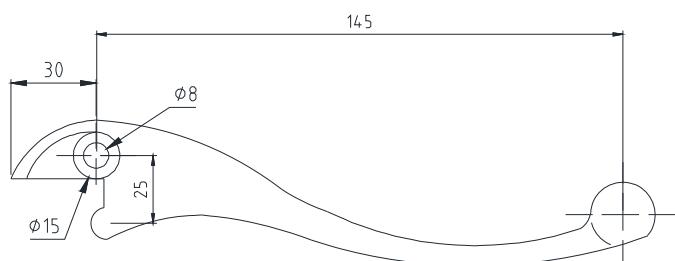
Drawing No.	HAWK-07
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Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016

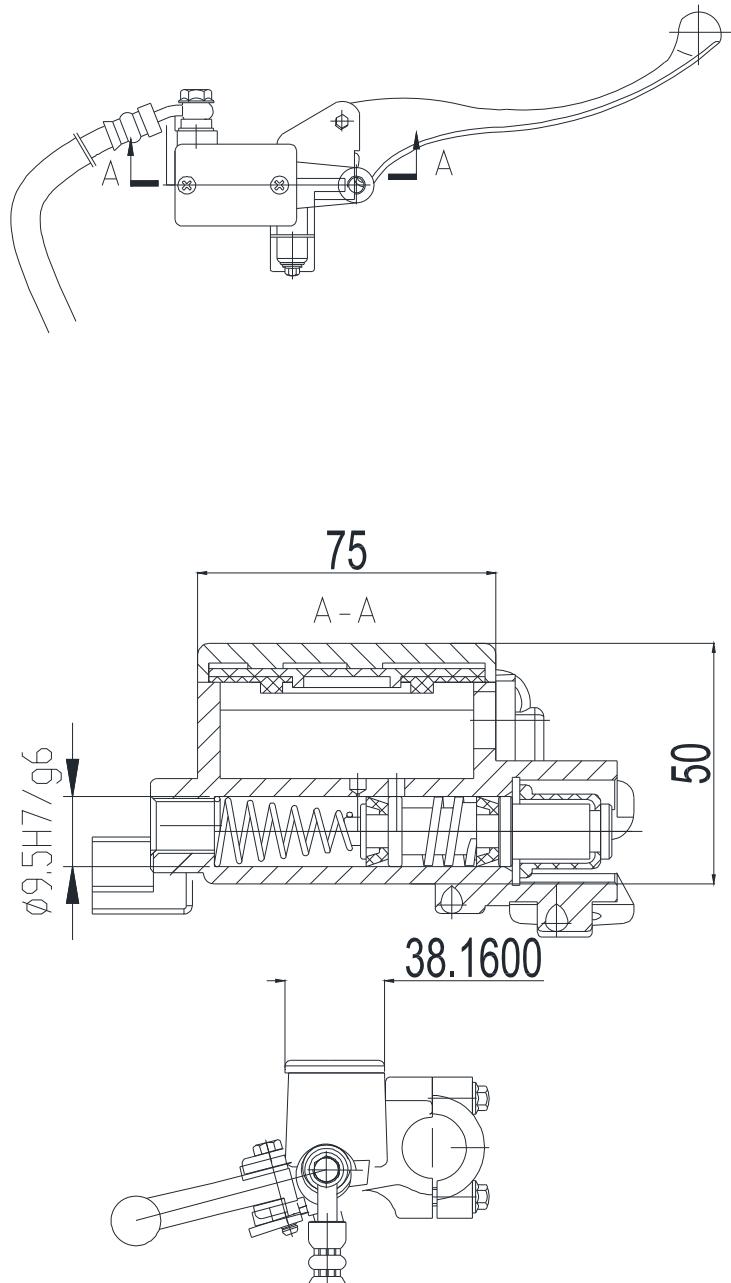


Vehicle Type	HAWK
Front and rear brake Lever	
Drawing No.	HAWK-08



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00
Application date: 28 November 2016

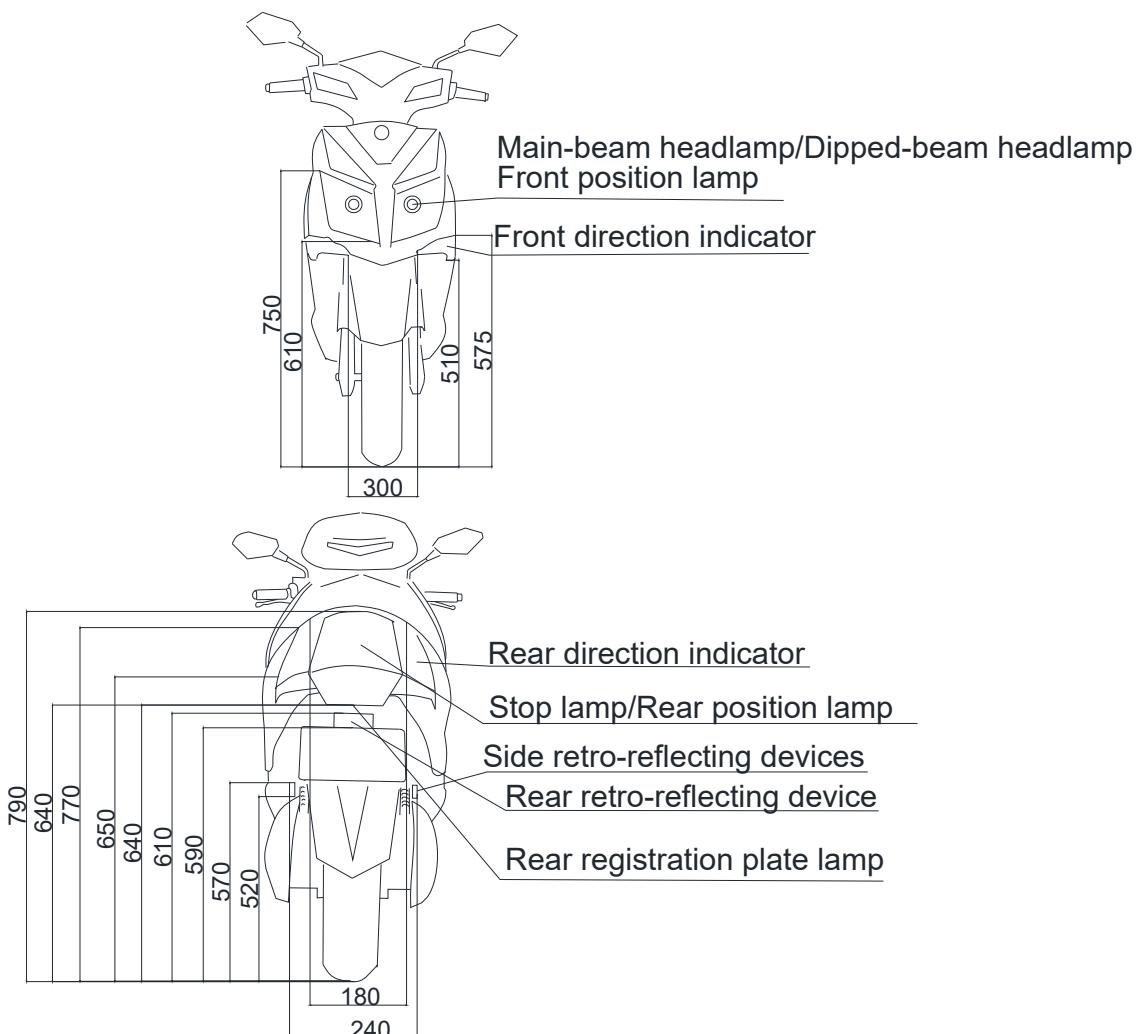


Vehicle Type	HAWK
Hydraulic Reservoir	
Drawing No.	HAWK-09

Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016



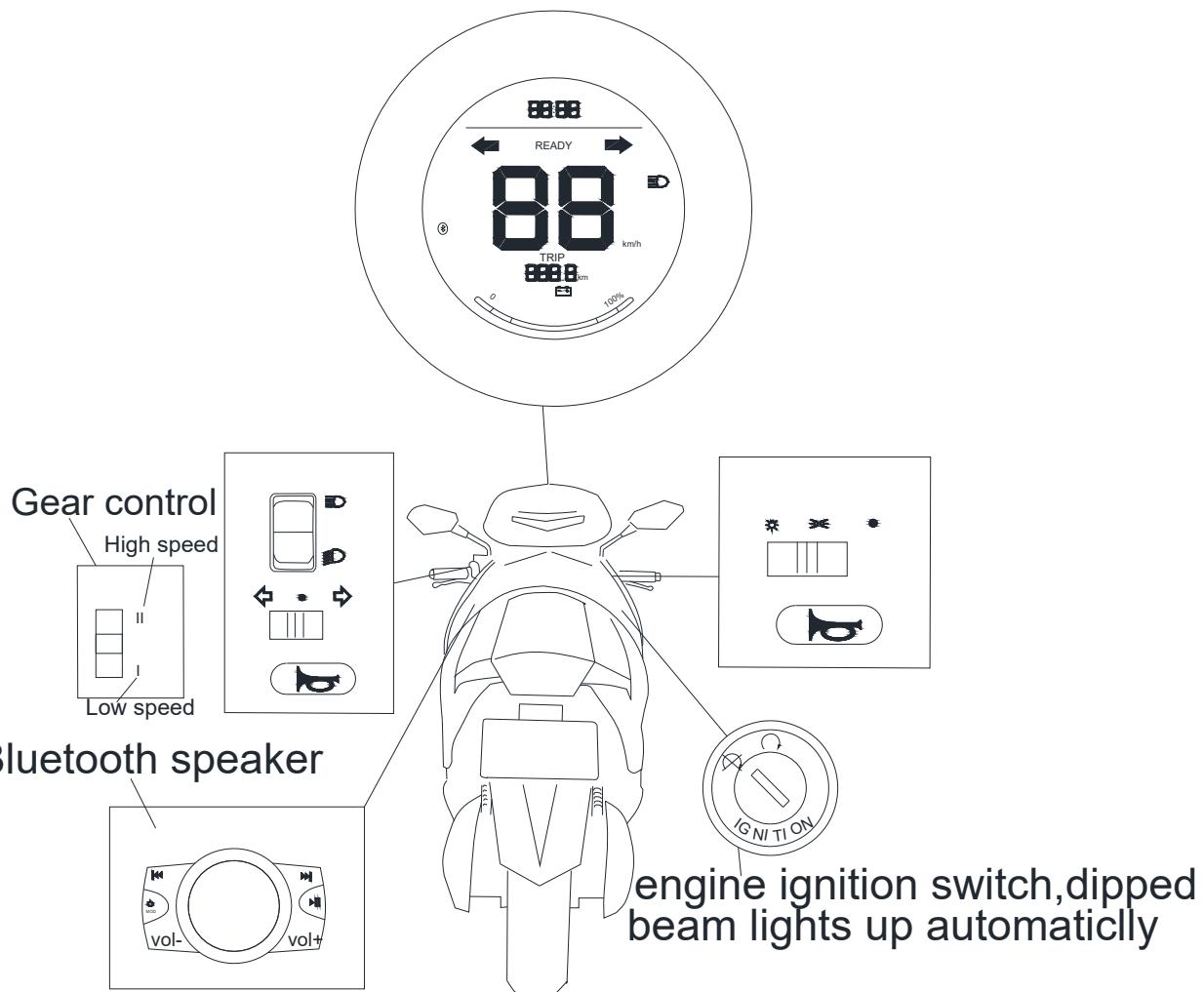
Dipped headlight automatically on as general switch activated (Automatic switch-on of lighting)

Vehicle Type	HAWK
Lighting Installation	
Drawing No.	HAWK-10

Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016



Vehicle Type	HAWK
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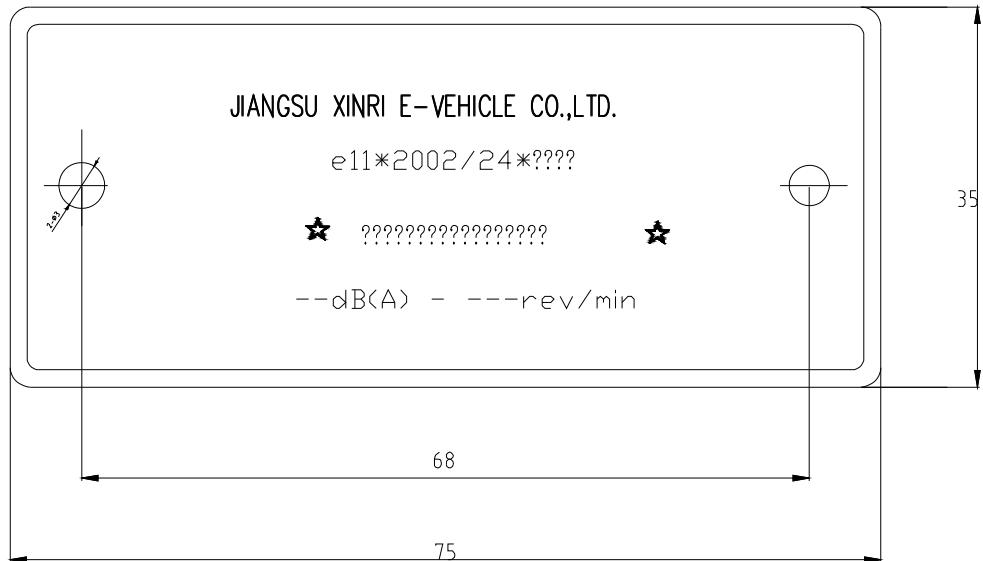
Control I.D., Indicator and Tell-tale

Drawing No.	HAWK-11
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Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016



Text height:4.0mm

Text depth:0.3mm

X:1000,y:200,z:300

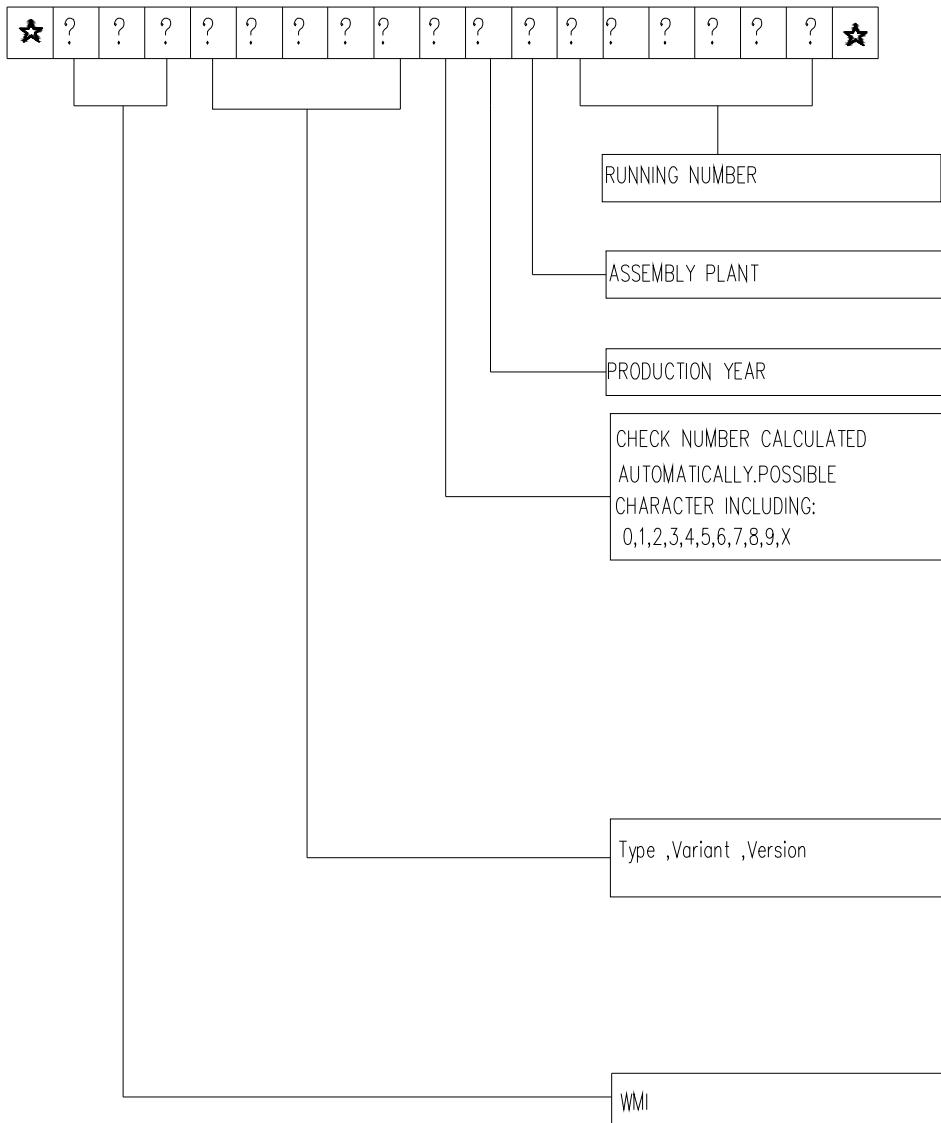
Vehicle Type	HAWK
The Statutory Inscription	
Drawing No.	HAWK-12



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016



Variant 1:☆LXRBE0GW1H0901369☆

Variant 3:☆LXRBE0GY3H0900001☆

Variant 5:☆LXRBA0GW4H0900101☆

Variant 2:☆LXRBE0GX4H0900001☆

Variant 4: ☆ LXRBE0GZ2H0900001☆

Variant 6:☆LXRBA0GX0H0900001☆

Vehicle Type	HAWK
VIN	
Drawing No.	HAWK-13



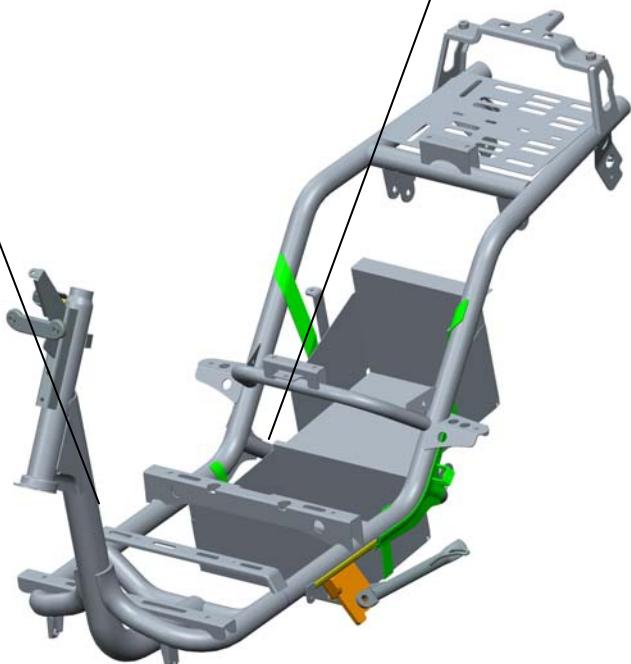
Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016

Location of VIN:X:290,y:1,z:240

Location Of The Statutory Inscription : X:1000,y:200,z:300

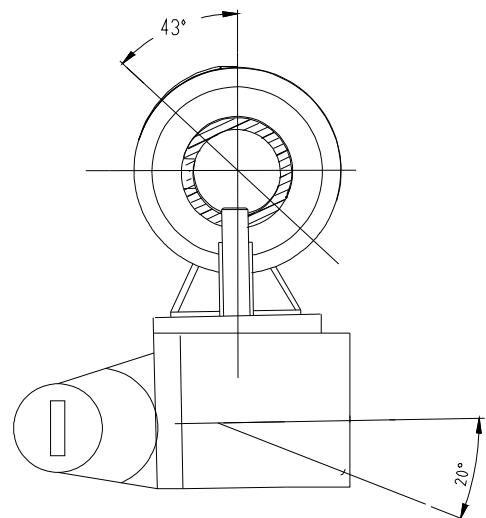
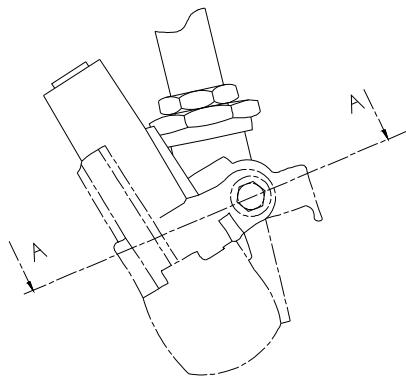


Vehicle Type	HAWK
The chassis	
Drawing No.	HAWK-14



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00
Application date: 28 November 2016



SECTION A - A

the bolts are welded together to prevent easy removal.

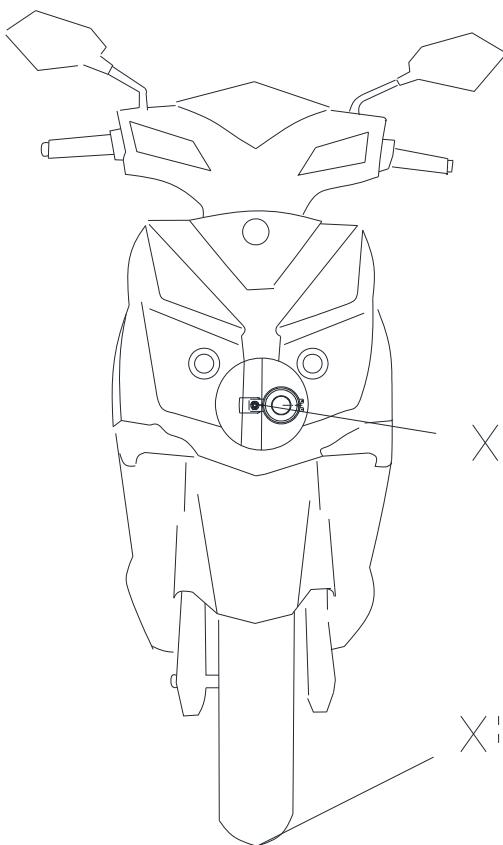
Vehicle Type	HAWK
Anti-tampering plate	
Drawing No.	HAWK-15



Jiangsu Xinri E-Vehicle Co.,Ltd.

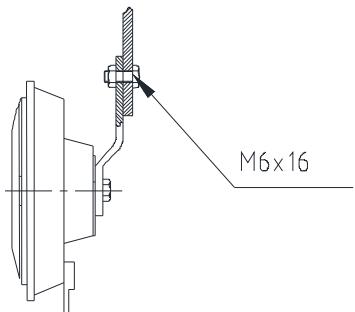
Information Document.:2002/24- HAWK -00

Application date: 28 November 2016



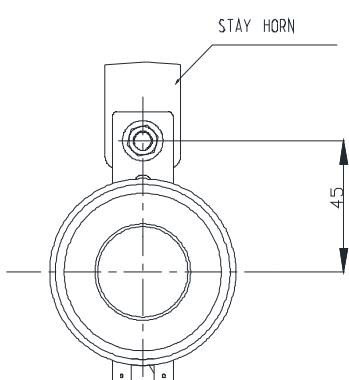
DETAIL 1

1:5



A DIRECTION

1:5



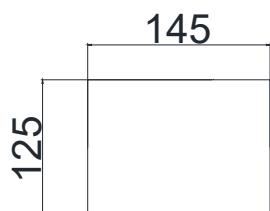
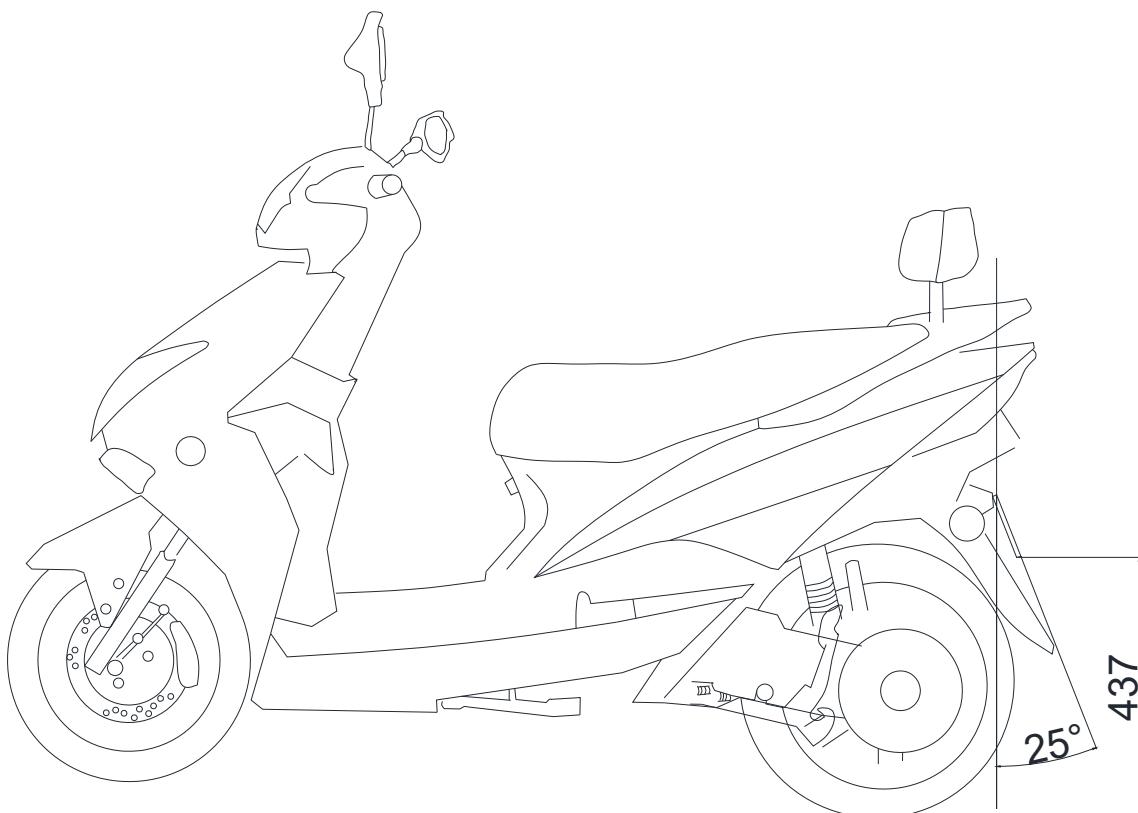
Vehicle Type	HAWK
Horn Installation	
Drawing No.	HAWK-16



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016



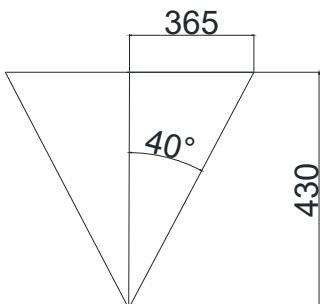
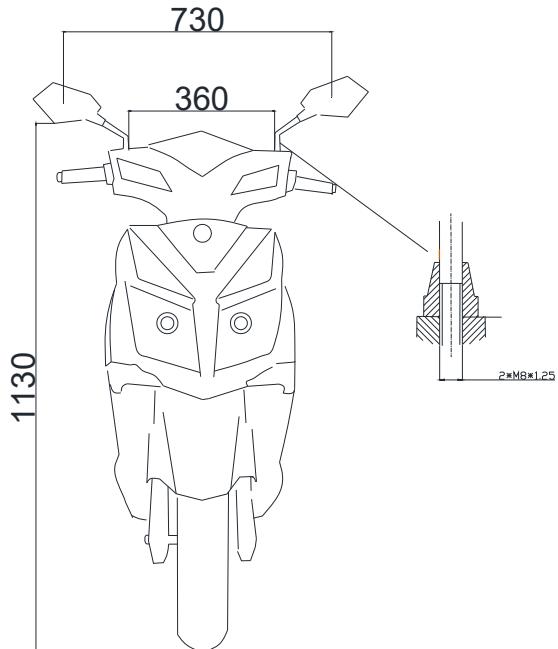
Vehicle Type	HAWK
Space for Rear Registration Plate	
Drawing No.	HAWK-17



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016

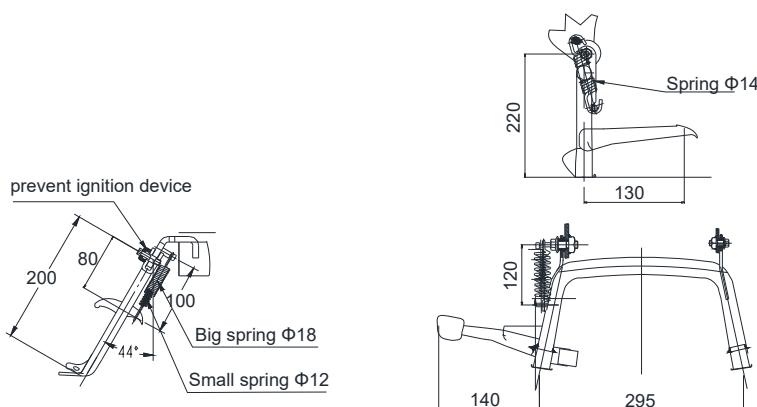
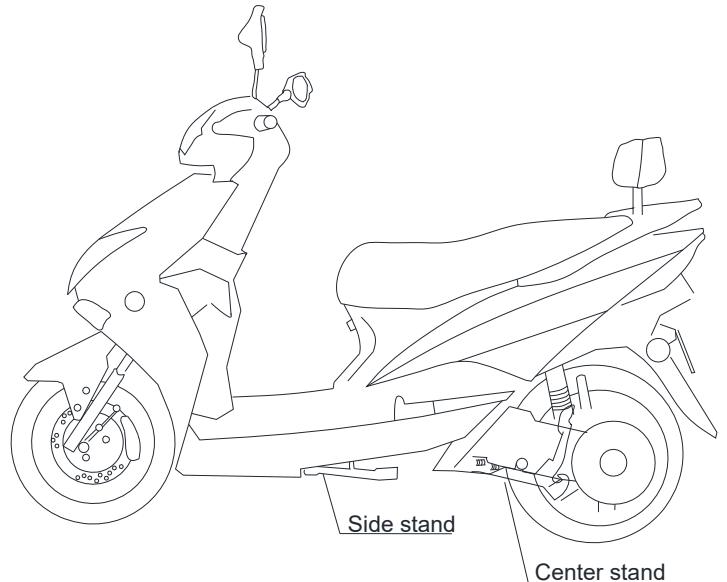


Vehicle Type	HAWK
Mirror Position	
Drawing No.	HAWK-18

Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016



Side stand

Center stand

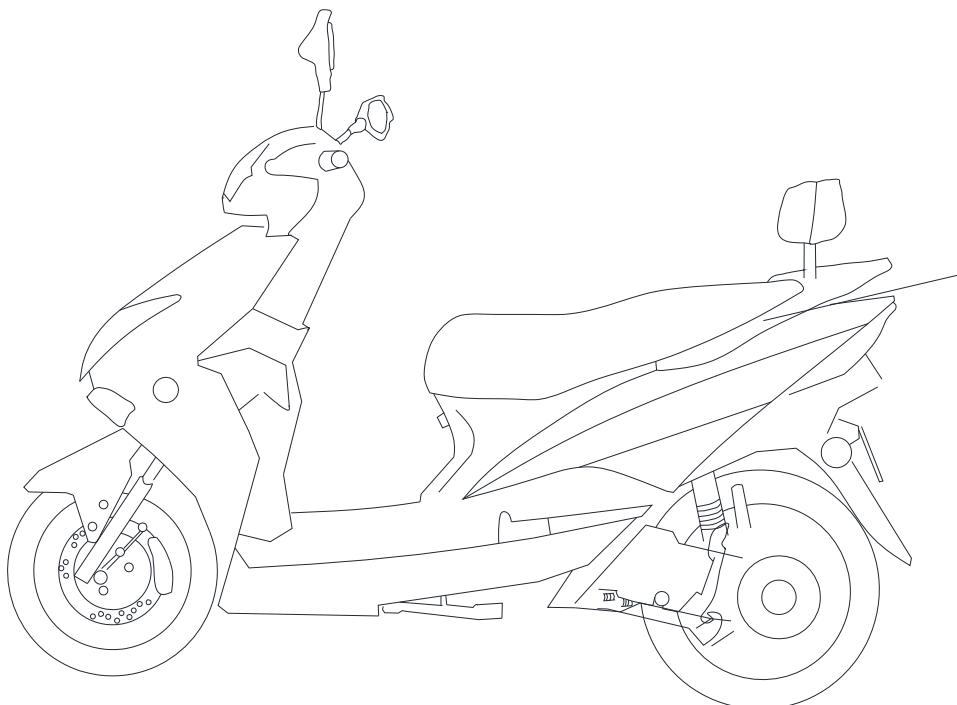
Vehicle Type	HAWK
Stand	
Drawing No.	HAWK-19



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016



Handle

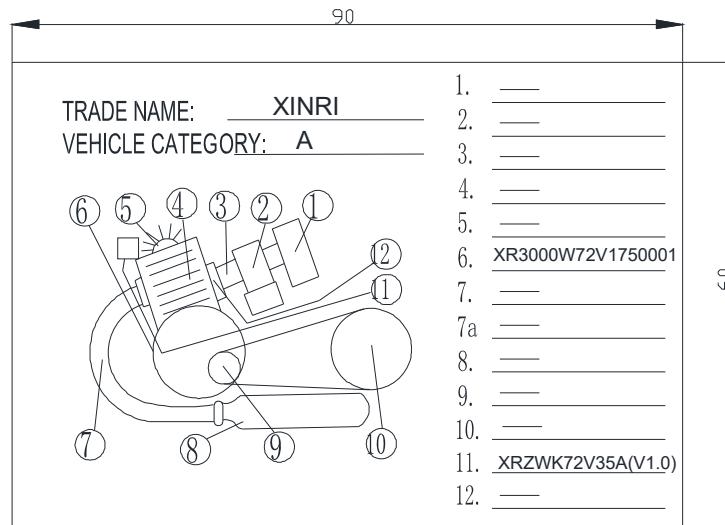
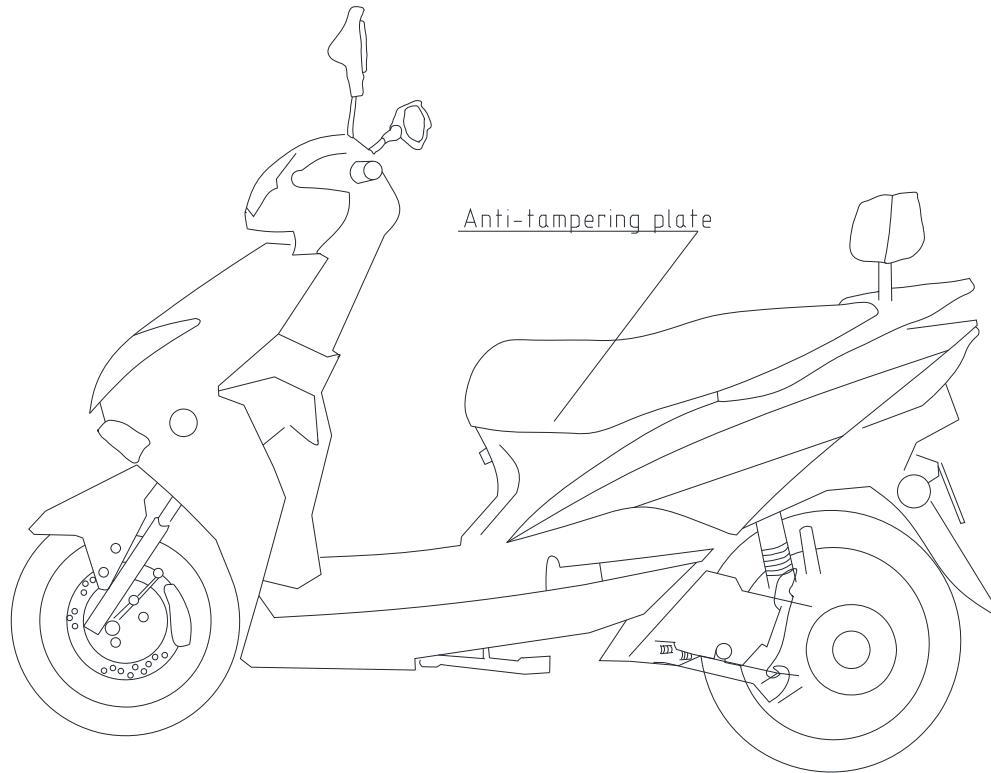
Vehicle Type	HAWK
Handle	
Drawing No.	HAWK-20



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016



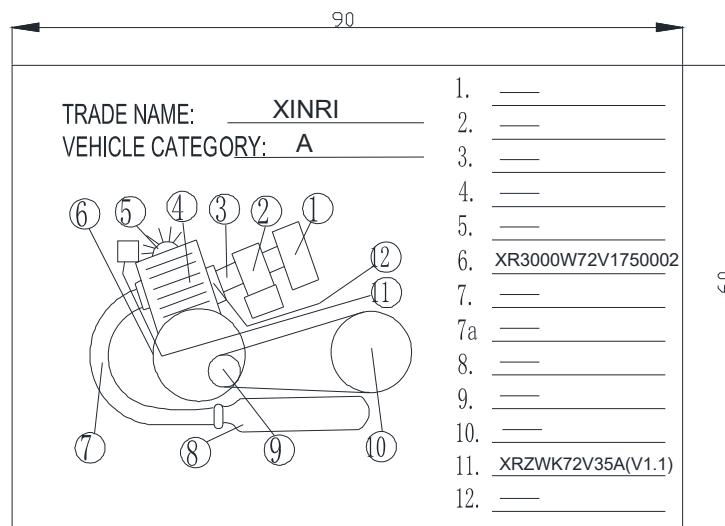
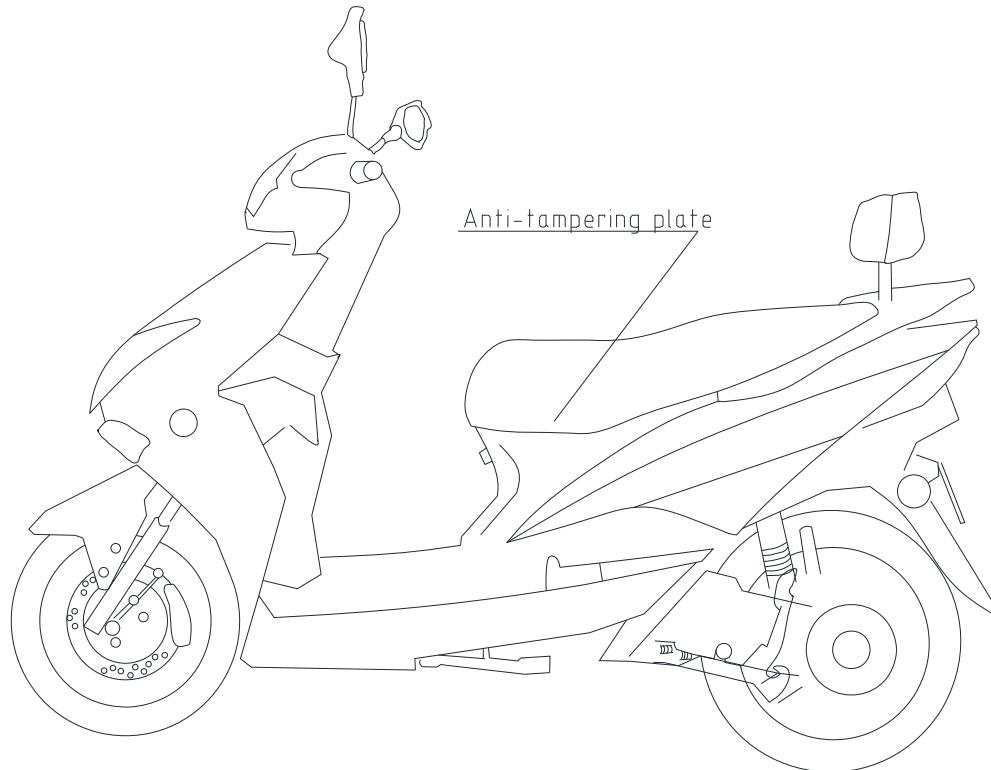
Variant 1

Vehicle Type	HAWK
Anti-tampering plate(1)	
Drawing No.	HAWK-21-1

Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016



Variant 2

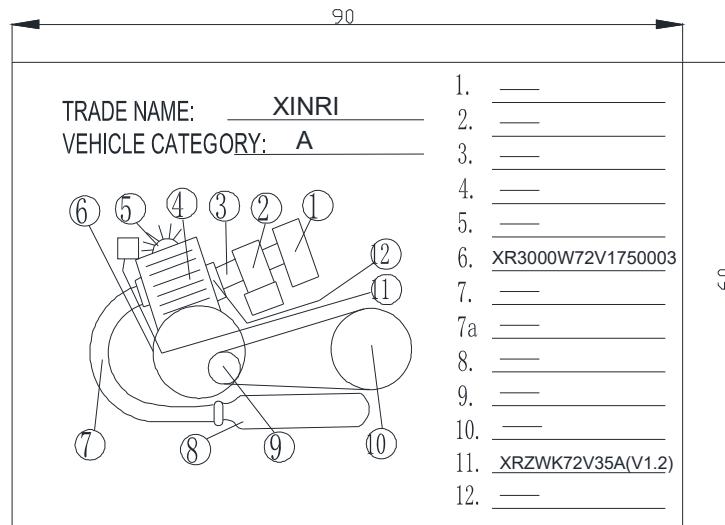
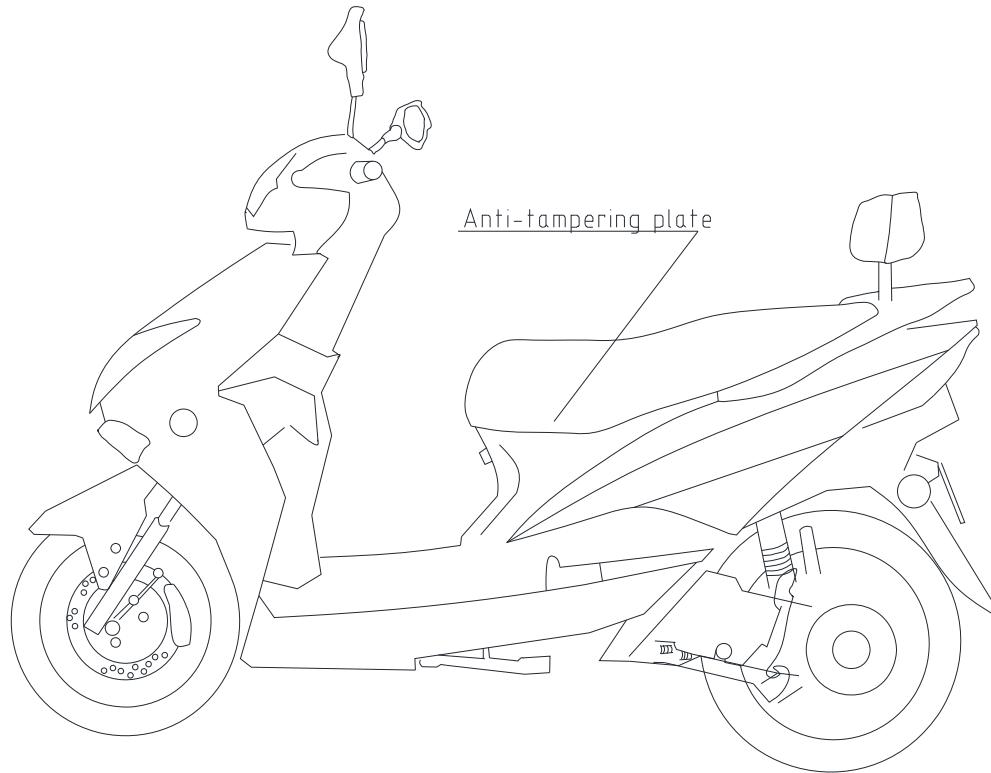
Vehicle Type	HAWK
Anti-tampering plate(2)	
Drawing No.	HAWK-21-2



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016



Variant 3

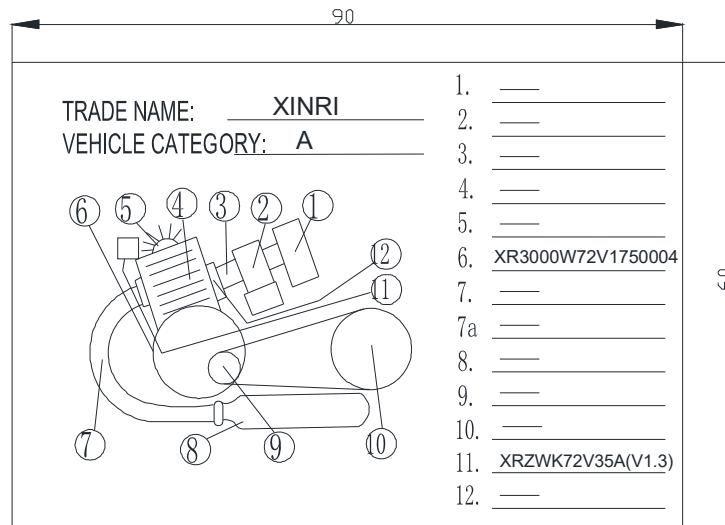
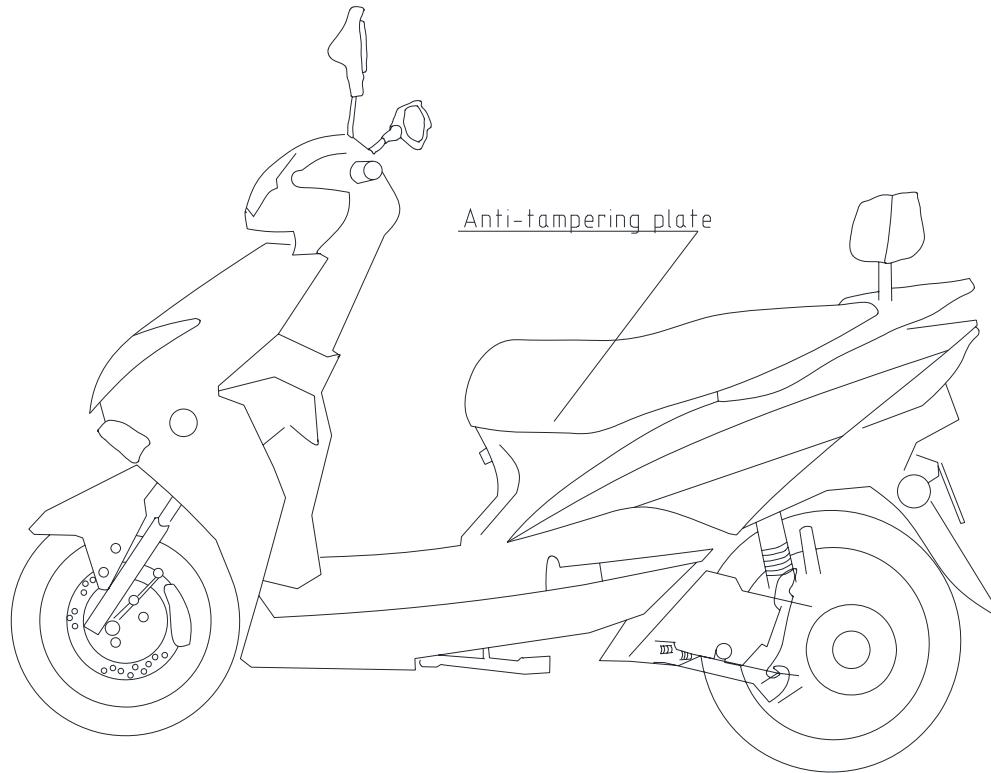
Vehicle Type	HAWK
Anti-tampering plate(3)	
Drawing No.	HAWK-21-3



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016



Variant 4

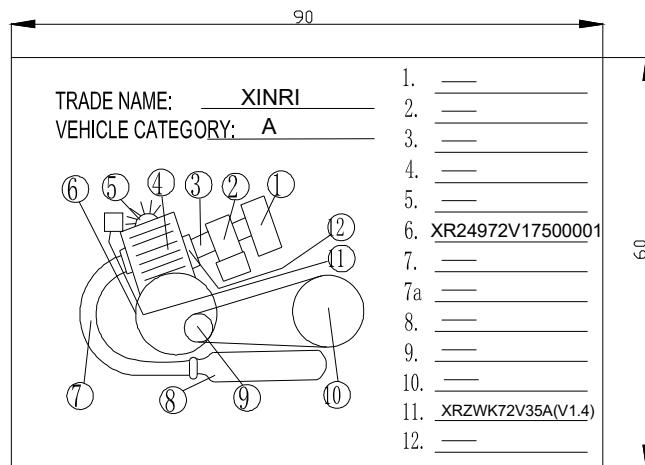
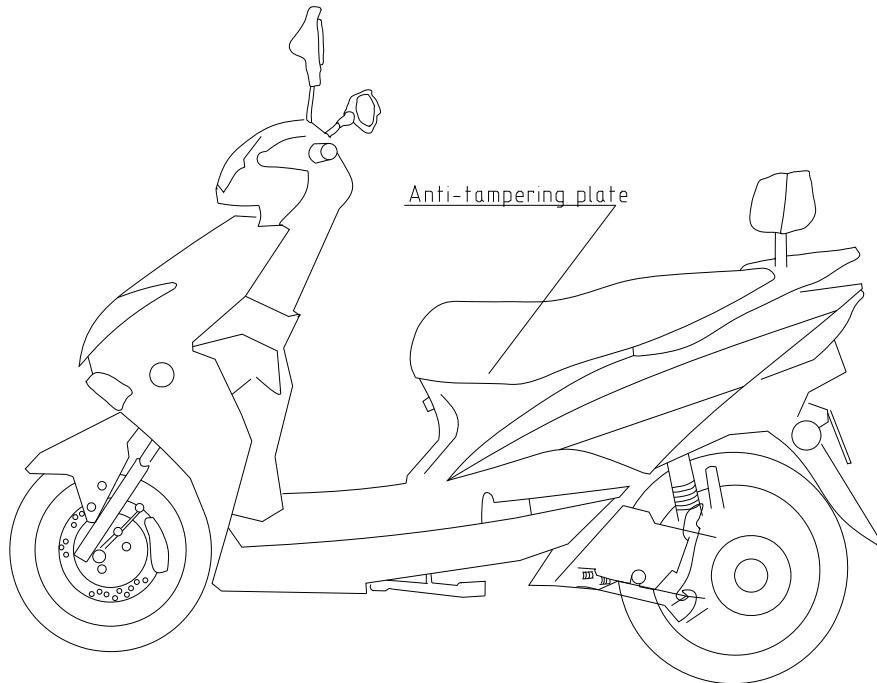
Vehicle Type	HAWK
Anti-tampering plate(4)	
Drawing No.	HAWK-21-4



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016



Variant 5

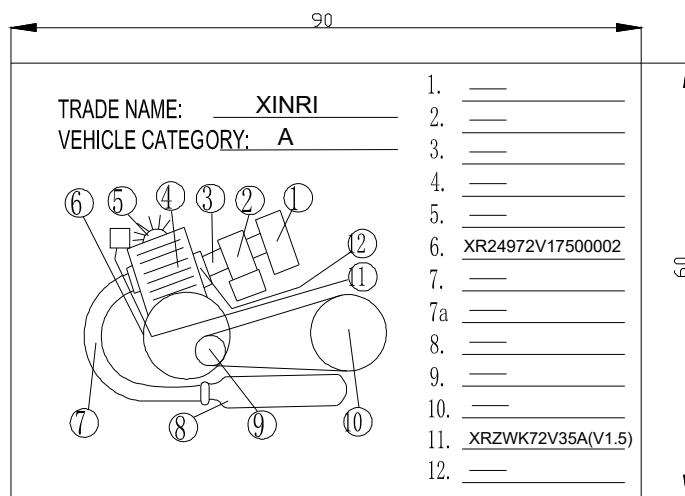
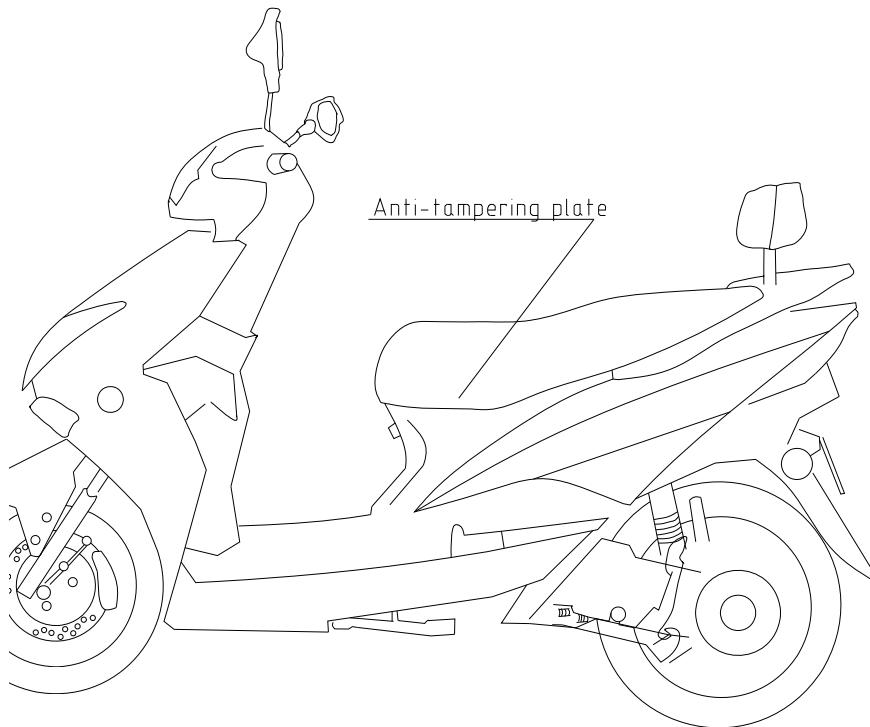
Vehicle Type	HAWK
Anti-tampering plate(5)	
Drawing No.	HAWK-21-5



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016



Variant 6

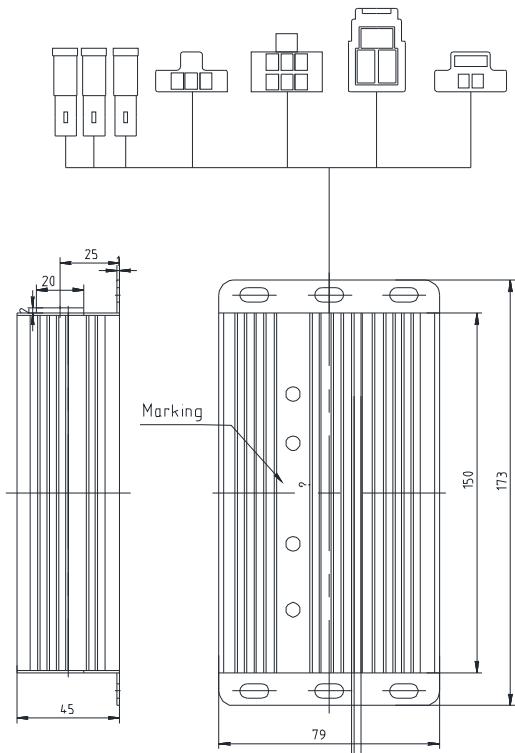
Vehicle Type	HAWK
Anti-tampering plate(6)	
Drawing No.	HAWK-21-6



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016



Variant 1:XRZWK72V35A(V1.0)

Variant 2:XRZWK72V35A(V1.1)

Variant 3:XRZWK72V35A(V1.2)

Variant 4:XRZWK72V35A(V1.3)

[Variant 5:XRZWK72V35A\(V1.4\)](#)

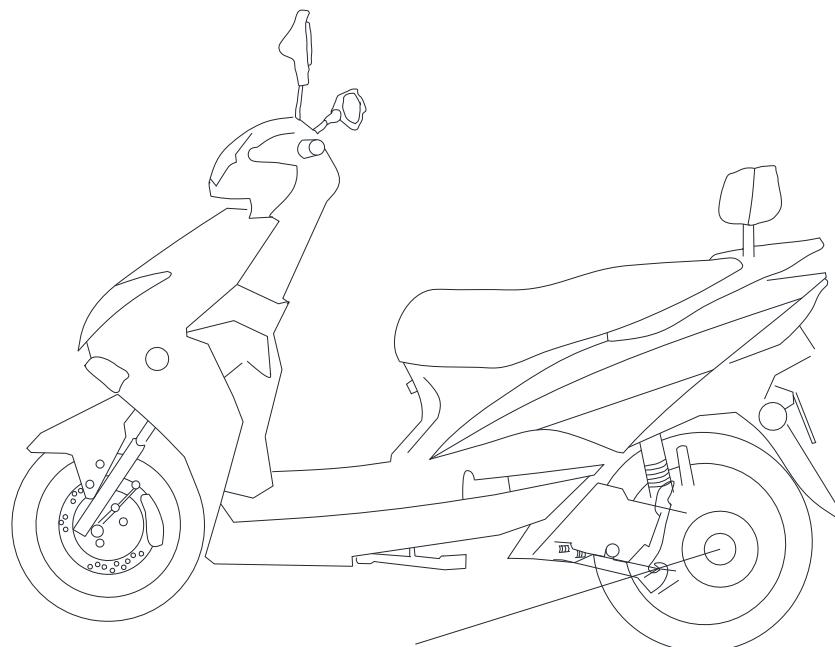
[Variant 6:XRZWK72V35A\(V1.5\)](#)

Vehicle Type	HAWK
Controller and Installation	
Drawing No.	HAWK-22



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00
Application date: 28 November 2016



Electric engine

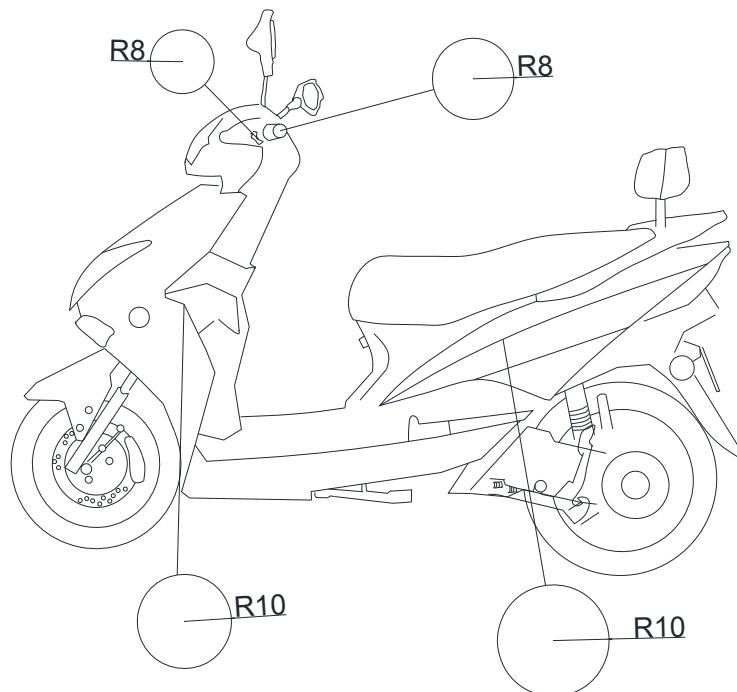
Vehicle Type	HAWK
Electric engine	
Drawing No.	HAWK-23



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016



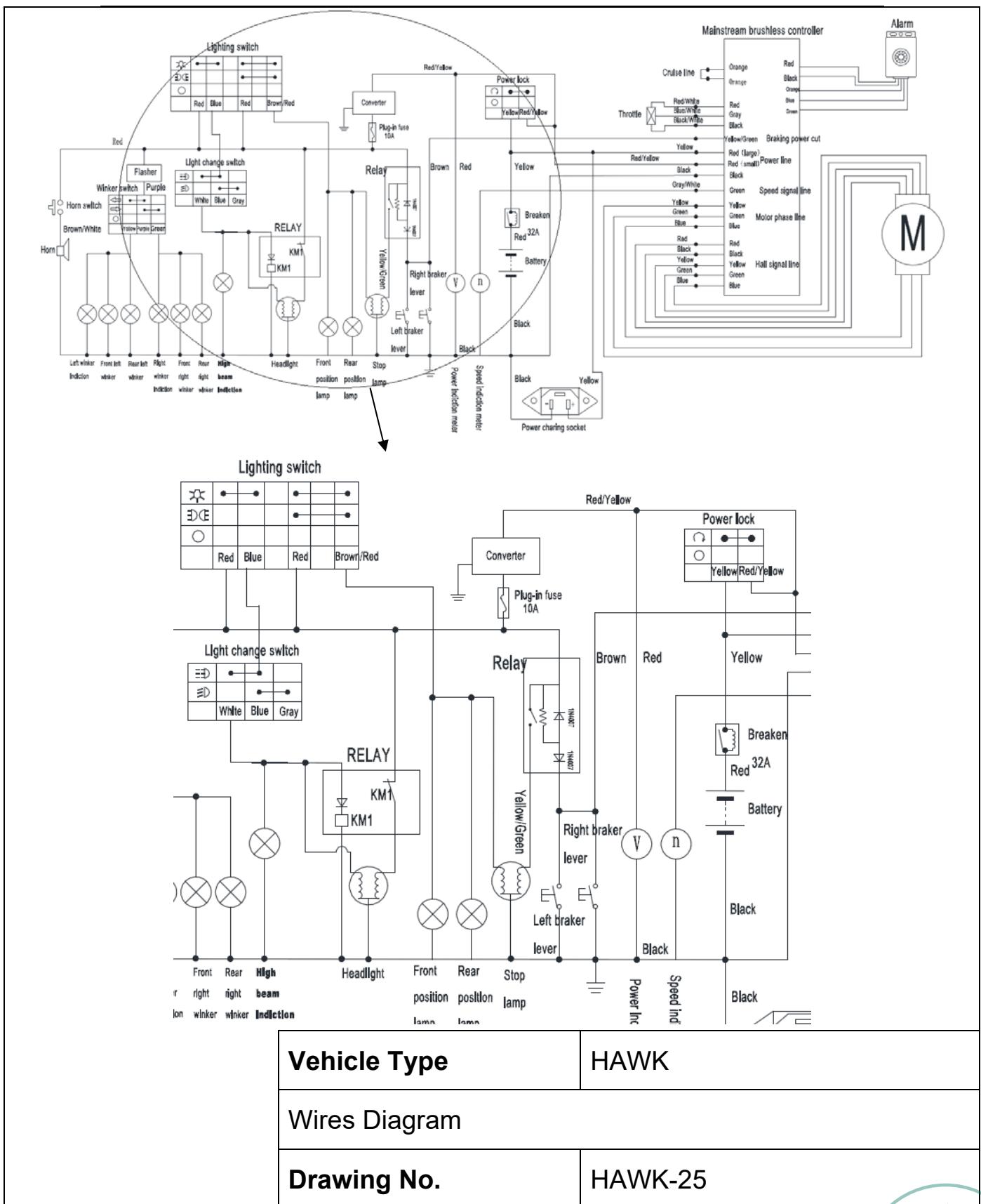
Vehicle Type	HAWK
External projections	
Drawing No.	HAWK-24



Jiangsu Xinri E-Vehicle Co.,Ltd.

Information Document.:2002/24- HAWK -00

Application date: 28 November 2016





Vehicle Certification Agency

VCA, 1 Eastgate Office Centre,
Eastgate Road, Bristol, BS5 6XX, United Kingdom
enquiries@vca.gov.uk | www.dft.gov.uk/vca | +44(0) 300 330 5797

Report Number: CWS381379

Issue: 0

This test report shall not be reproduced except in full, without written approval of
the technical service.

Test Report: Whole Vehicle Type Approval for Two or Three Wheel Vehicles and Quadricycles

Legislation

EC Directive 2002/24/EC as amended by Directive 2013/60/EU

Test Details

Location of Test: Nanchang Motorcycle Quality Inspection and Testing Institute
Date of Test: 31 March-28 April 2017
VCA Representative(s): Huang Kaimin
Manufacturer's Representative(s): Xu Zhibin
Reason for Test Report: New approval / Extension of approval / Test report only

Manufacturer Details

Name and Address: Jiangsu Xinri E-Vehicle Co.,Ltd.
No.501,Xishan Road,Anzhen Town,Xishan, District,Wuxi
City,Jiangsu,P.R.China
Type: HAWK
Commercial Description: Refer to manufacturer's documentation
Category: L1e

Conclusion

The above mentioned vehicle was tested in accordance with the above mentioned legislation and
was found to comply in all respects.

Signature:

Name: Du Song
Position: Type Approval Engineer
Date: 28 April 2017

List of Annexes

Annex	No of Pages	Subject
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II		





Vehicle Certification Agency

VCA, 1 Eastgate Office Centre,
Eastgate Road, Bristol, BS5 6XX, United Kingdom
enquiries@vca.gov.uk | www.dft.gov.uk/vca | +44(0) 300 330 5797

Report Number: CWS381379

Issue: 0

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Worst Case Rationale

Extension approval for two variants: To cover

- 1.Add 249W Electrical motor
- 2.Add new make and Commercial name

So have new test for Anti-tampering, Maximum speed, Masses and Dimensions, EMC and ID controls. For the other items, VCA test report CWS378045 remain valid to this extension approval.

Note: Include information on variants and versions this report covers, as applicable

Vehicle Specification

Vehicle Identification Number:

See information document item 0.7.1

Variant/Version:

6 variants

Manufacturer's Documentation

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

Yes



Vehicle Certification Agency

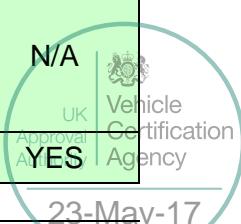
VCA, 1 Eastgate Office Centre,
Eastgate Road, Bristol, BS5 6XX, United Kingdom
enquiries@vca.gov.uk | www.dft.gov.uk/vca | +44(0) 300 330 5797

Report Number: CWS381379

Issue: 0

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Directive	Subject	Test Report Number or Reasoning for Exception	Complies
95/1	Maximum Torque and Maximum Net Engine Power; Maximum Design Speed of the Vehicle	CWS381379	YES
97/24 (C7)	Anti-tampering Measures for Mopeds and Motorcycles	CWS381379	YES
97/24 (C6)	Fuel Tank	N/A	N/A
93/93	Masses and Dimension	CWS381379	YES
97/24 (C10)	Coupling Devices and their Attachment	N/A	N/A
97/24 (C5)	Anti-air Pollution Measures	N/A	N/A
97/24 (C1)	Tyres	CWS378045	YES
93/14	Braking System	CWS378045	YES
2009/67	Installation of Lighting and Light Signalling Devices on the Vehicle	CWS378045	YES
97/24 (C2)	Lighting and Light Signalling Devices on the Vehicle	N/A	N/A
93/30	Audible Warning Device	CWS378045	YES
2009/62	Position for the Mounting of Rear Registration Plate	CWS378045	YES
97/24 (C8)	Electromagnetic Compatibility	CWS381379	YES
97/24 (C9)	Sound Level and Exhaust System	N/A	N/A
97/24 (C4)	Rearview Mirrors	CWS378045	YES
97/24 (C3)	External Projections	CWS378045	YES
2009/78	Stand	CWS378045	YES
93/33	Devices to Prevent Unauthorised Use of the Vehicle	CWS378045	YES
97/24 (C12)	Windows; Windscreen Wipers; Windscreen Washers; Devices for De-icing and De-misting for Three Wheel Mopeds, Motor Tricycles and Quadricycles with Bodywork	N/A	N/A
2009/79	Passenger Handhold	CWS378045	YES
97/24 (C11)	Anchorage Points for Safety Belts and Safety Belts for Three Wheel Mopeds, Motor Tricycles and Quadricycles with Bodywork	N/A	N/A
2000/7	Speedometer	CWS378045	YES





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Report Number: CWS381379

Issue: 0

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the technical service.

2009/80	Identification of Controls, Tell-tales and Indicators	CWS381379	YES
2009/139	Statutory Inscriptions	CWS378045	YES

Remarks

None

Note: VCA apply measurement uncertainty to calibrated items but not test results.





Vehicle Certification Agency

Vehicle Certification Agency,
1 The Eastgate Office Centre
Eastgate Road,
Bristol,
BS5 6XX,
United Kingdom.
Telephone: +44(0) 300 330 5797
Email: enquiries@vca.gov.uk
www.vca.gov.uk

TEST REPORT: ANTI-TAMPERING FOR 2 WHEEL MOPEDS AND MOTORCYCLES

Directive 97/24/EC Chapter 7 as amended by Directive 2006/27/EC
Regulation ww.00 (Revision y Amendment z) – N/A

REPORT/JOB NUMBER: CWS381379

TEST DETAILS

Location of Test	Nanchang Motorcycle Quality Inspection and Testing Institute
Date of Test	18 April 2017
VCA Representative(s)	Huang Kaimin
Manufacturer's Representative(s)	Xu Zhibin
Reason for Test	Extension of approval

MANUFACTURER DETAILS

Manufacturer's Name	Jiangsu Xinri E-Vehicle Co.,Ltd.
Manufacturer's Address	No.501,Xishan Road,Anzhen Town,Xishan, District,Wuxi City,Jiangsu,P.R.China
Model Type & description	HAWK
Category	L1e

CONCLUSION

The above mentioned vehicle/component was tested in accordance with EC Directive 97/24/EC and was found to comply in all respects

Signature:
Name: Du Song
Position: Type Approval Engineer
Date: 28 April 2017

LIST OF ANNEXES

ANNEX	No of PAGES	SUBJECT
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Vehicle
Certification
Agency

**TEST REPORT: ANTI-TAMPERING
FOR 2 WHEEL MOPEDS AND
MOTORCYCLES**
Directive 97/24/EC Chapter 7
Regulation xx.00 – N/A

TEST SPECIFICATION AND WORST CASE RATIONALE

Two variants

Tests required (if more than one is applicable)

Anti-tampering

COMPONENT SPECIFICATION (as specified in agreed worse case rationale)

Yes

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 worse case rationale

Yes

FACILITY AND EQUIPMENT CHECKS

- | | | | | |
|---|---|----------------------------------|----------------------|--------------------------|
| 1 | Generic Risk assessment followed | <i>Insert RA identifier here</i> | <input type="text"/> | N/A |
| | OR | | | |
| | Specific Risk assessment completed and stored in electronic job folder | | | <input type="text"/> N/A |
| 2 | Facilities and test equipment are appropriate | | | <input type="text"/> N/A |
| | Brief description of test equipment: | | | |
| 3 | Calibration certificates checked and valid, recorded in the following table | | | <input type="text"/> N/A |



TEST REQUIREMENTS

		Complies Yes/NA
App 1	Manufacturers Information document according to Appendix 1	Yes
1.3	Vehicle category for anti tampering: A = moped B = upto 125cc & upto 11kW C = upto 25 kW upto 0.16 kW/kg (power/mass in running order) D = other than A,B, or C	Yes N/A N/A N/A
2.1	Interchangeability of parts does not cause increase of more than: 5km/h maximum speed (Category A) 10% maximum power (Category B) Manufacturers declaration received <i>Parts covered:</i> 2-stroke engines: Cylinder/piston combination, carburettor, intake pipe, exhaust system. 4 stroke engines: Cylinder head, camshaft, cylinder/piston combination, carburettor, intake pipe, exhaust.	Yes N/A Yes Yes
2.2	Declaration that modifications to fuel feed and ignition do increase: Moped maximum speed by more than 5 km/h Motorcycle maximum power by more than 10% <u>Maximum speed and power must still comply with vehicle category</u>	Yes N/A
2.3	Category B Motorcycles	
2.3.1	- Non-removable sleeve in intake fitted (60HRC <4mm thick) and - Intake attached with tamperproof fixing and - Intake marked with B OR	N/A
2.3.2	- Intake restrictor fitted and location marked on outside (<4mm	N/A



	thick or 5mm if rubber) and - Intake attached with tamperproof fixing and - Intake marked with B OR 2.3.3 - Restriction is in the cylinder head and - Cylinder head marked with B	
2.3.5	Diameter of restriction shown on drawing and the manufacturer confirms that restrictor is the critical part	N/A
3 Additional requirements for category A and B vehicles <i>Mandatory only if needed to prevent increase of moped speed (>5km/h) or motorcycle power (>10%)</i>		
3.1	Cylinder head gasket thickness when mounted Mopeds < 1.3mm Motorcycles < 1.6mm	Yes N/A
3.2	Cylinder – crankcase gasket when mounted < 0.5mm (2 strokes)	N/A
3.3	2 strokes: Piston at TDC must not cover inlet port	N/A
3.4	2 strokes: Rotating the piston by 180° must not increase power	N/A
3.5	No artificial restriction in exhaust system	No
3.6	Effective length of exhaust is not determined by removable parts	Yes
3.7	Engine load limiter (e.g. Throttle control or twist grip stops) not fitted? (Forbidden).	No
3.8	Electric/electronic speed restrictor fitted to Category A vehicles? (If yes manufacturer must show its modification or removal does not result in a speed increase of > 10%).	N/A
	Spark cut or inhibit system? (Forbidden if they result in HC emissions or increase in fuel consumption)	N/A
	Ignition advance device does not cause a difference of >10% when disconnected	Yes
3.9	Reed valves fitted with tamperproof bolts	Yes



3.10

Markings on parts

Parts marked in a visible and durable way (labels are OK if they are destroyed by removal).

Yes

Marking is at least 2.5mm high (letters/figures/symbols)

Yes

Intake silencer (air filter) marked:

N/A

Carburettor (or equivalent) marked:

N/A

Inlet pipe if it is a separate part marked:

N/A

(B if category B vehicle)

Cylinder:

N/A

Cylinder head:

N/A

Crankcase:

Variant5:

XR24972V17500001

Variant6:

XR24972V17500002

Yes

Exhaust pipe:

N/A

(if separate from silencer)

N/A

Catalytic converter (If not integrated into silencer):

N/A

Silencer:

N/A

Transmission:

N/A

(output gear number of teeth)

Transmission:

N/A

(rear wheel gear number of teeth)

Electrical or electronic devices for the engine:
(ECU, CDI etc)

Variant5:

XRZWK72V35A(V1.4)

Variant6:

XRZWK72V35A(V1.5)

Yes

Restricted section:

N/A

3.10.2

Anti tampering control plate

3.10.2.1

Plate is/has:

Yes

At least 60 x 40mm

Yes

Fixed to the vehicle in a durable manor

Riveted plate/sticker

Yes

Readily accessible for inspection

Yes

Markings are at least 2.5mm high

Yes

3.10.3.3

Follows example in figure 1

Yes

Plate shows: (Not applicable items can be omitted)

Yes

Manufacturers trade name or mark

Yes

Vehicle anti tampering category: A



Vehicle
Certification
Agency

**TEST REPORT: ANTI-TAMPERING
FOR 2 WHEEL MOPEDS AND
MOTORCYCLES**
Directive 97/24/EC Chapter 7
Regulation xx.00 – N/A

Final gear ratio teeth/diameter (item 9 and 10)
Code or part numbers (other items)

Yes

N/A

Remarks (if possible): None



Vehicle
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Vehicle Certification Agency

1 The Eastgate Office Centre

Eastgate Road

Bristol

BS5 6XX

United Kingdom

Telephone: +44(0) 300 330 5797

Email: enquiries@vca.gov.uk

www.dft.gov.uk/vca/

TEST REPORT: Maximum torque and maximum net engine power and maximum speed of two or three wheel motor vehicles

95/1/EC – 2002/41/EC (Annex II) Engine power

REPORT/JOB NUMBER:	CWS381379
--------------------	-----------

TEST DETAILS

Subject	Maximum torque and maximum net engine power and maximum speed of two or three wheel motor vehicles (Mopeds and light quadricycles only)
EC Directive	95/1/EC – 2002/41/EC
ECE Regulation	N/A
Location of Test	Nanchang Motorcycle Quality Inspection and Testing Institute
Date of Test	20 April 2017
VCA Representative	Huang Kaimin





Vehicle
Certification
Agency

TEST REPORT: Maximum torque and maximum net engine power of two or three wheel motor vehicles

Paragraph	Parameter	Complies
Manufacturer's Representative	Xu Zhibin	
Reason for Test	Extension of approval	

MANUFACTURER DETAILS

Manufacturer's Name	Jiangsu Xinri E-Vehicle Co.,Ltd.
Manufacturer's Address	No.501,Xishan Road,Anzhen Town,Xishan, District,Wuxi City,Jiangsu,P.R.China
Model Type & description	HAWK
Category	L1e

CONCLUSION The above mentioned vehicle was tested in accordance with 95/1/EC – 2002/41/EC and was found to comply in all respects

Signature:

Name: Du Song

Position: Type Approval Engineer

Date: 28 April 2017

LIST OF ANNEXES

TR/M/C/EWVTA ITEM 18/00

Revision 2

Report/Job Number:CWS381379

30 March 2017

Page 2 of 14
UK
Approval
Authority

23-May-17





Vehicle
Certification
Agency

TEST REPORT: Maximum torque and maximum net engine power of two or three wheel motor vehicles

Paragraph	Parameter	Complies
-----------	-----------	----------

ANNEX	No of PAGES	SUBJECT
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TEST SPECIFICATION/WORST CASE RATIONALE:

Adding two variants: variant 5,6

- | | | |
|---|--|-----|
| 1 | Risk assessment completed and stored in job folder | N/A |
| 2 | Facilities and test equipments are appropriate | Yes |
| 3 | Calibration certificates checked and valid, recorded below | |

Equipment	Serial No.	Calibration data
VBOX	VBOXII	Valid to 10 October 2017



Vehicle
Certification
Agency

TEST REPORT: Maximum torque and maximum net engine power of two or three wheel motor vehicles

<i>Paragraph</i>	<i>Parameter</i>	<i>Complies</i>



Vehicle
Certification
Agency



Paragraph	Parameter	Complies
4 3.1.1	Check of manufacturers documentation	
	Total running hours prior to test	[REDACTED] hrs
10 Table 1	Standard intake system fitted	
	Standard exhaust system fitted	
	Air intake temperature measurement within 150 mm of air cleaner inlet	
	Exhaust back pressure measurement within 150 mm of engine exhaust outlet	
	Fan fitted	
	Remarks	[REDACTED]
4 3.4, 3.5	Cold start device fitted, type	None
	Permitted auxiliaries fitted:	
10 5.1	1)	Model: [REDACTED]
	2)	Model: [REDACTED]
	3)	Model: [REDACTED]



Paragraph	Parameter	Complies
10 5.1.2	Other auxiliaries fitted: 1) 2) 3)	Model: Model: Model: Power absorbed details available for auxiliaries

Test Equipment Details

2	2.1 Dynamometer make:	
	Type:	
	Model:	
	Serial Number:	
	Calibration date:	
	2.2 Tachometer:	
	2.4 Temperature gauges:	
	2.6 Pressure gauges:	
	2.5 Barometer:	
	2.3 Fuel measuring Device:	
	Type:	
	Exhaust volume:	N/A



Paragraph	Parameter	Complies
3.3.7	Water outlet temperature:	°C
3.3.9	Oil temperature at [REDACTED]	°C
	Weight of fuel used for consumption test:	g
	Volume of fuel used for consumption test:	mm ³
	All test equipment correctly positioned:	





Paragraph	Parameter	Complies
Fuel and Lubricant		
6	Make of Fuel: (Fuel complies with emissions reference fuel standard for at least RON, MON, Density, Calorific value)	
10 3.3.12	Specification of fuel: Specific gravity at 15°C	kg/l
6	Cetane MON	Cetane RON
	Lower Calorific Value	MJ/kg
10 Table II	All engine setting in accordance with manufacturers specifications	
10 3.3.2	Adequate air supply available: Lubricant make: Lubricant specification: Lubricant SAE viscosity: Atmospheric Conditions:	
4 4.2.2.1	Barometric pressure: Ambient air temperature: Dry barometric pressure (ps): Air Intake Temperature (t):	kPa °C kPa °C



Paragraph	Parameter	Complies
Cubic capacity:		litres
Number of cylinders:		
Layout of cylinders:		
2 or 4 stroke:		
Fuel feed:		
Declared net power:	kW @	rpm
Measured net power:	kW @	rpm
Measured power within % of declared power:		
10% mopeds <1 kW		
5% mopeds >1 kW		
5% motorcycles <11 kW		
2% motorcycles >11 kW		
Speed tolerance 1.5%		
Declared net torque:	Nm @	rpm
Measured net torque:	Nm @	rpm
Measured Torque within % of declared torque:		
10% mopeds <1 kW		
5% mopeds >1 kW		



Vehicle
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Agency

TEST REPORT: Maximum torque and maximum net engine power of two or three wheel motor vehicles

Paragraph	Parameter	Complies
Speed tolerance 1.5%		
Idle speed	rpm	
Atmospheric correction factor $\alpha_1 =$ (between 0.93 to 1.07)		
Transmission correction factor $\alpha_2 =$		



TEST REPORT: Maximum torque and maximum net engine power of two or three wheel motor vehicles

Paragraph	Parameter	Complies
Maximum speed		
	Manufacturers Declared Maximum Speed	Variant 5:40km/h Variant 6:25km/h
	Engine Number:	Variant 5: XR24972V1750000 1 Variant 6: XR24972V1750000 2
	Mass in running order with rider:Variant 5,6	Yes
	Front 70 kg	Yes
	Rear 90 kg	Yes
	Transmission and gearbox:	N/A
	Final Drive Ratio:	N/A
	Tyres:	Front 110/70-12 Yes



Vehicle
Certification
Agency

TEST REPORT: Maximum torque and maximum net engine power of two or three wheel motor vehicles

Paragraph	Parameter	Complies
	Rear 120/70-12	Yes
Tyre Pressures kPa:	Front 225 kPa Rear 225 kPa	Yes Yes
Rider Weight (75 +/-2kg):	75kg	Yes
Rider Height (1.75 +/-0.02m)	1.73m	Yes
Atmospheric Conditions:		
Atmospheric pressure (limit 87 to 107 kPa)	100.8kPa	Yes
Temperature (limit 5 to 35 °C)	24°C	Yes
Relative Humidity (limit 30 to 90 %)	43%	Yes
Wind Speed (limit av 3 m/s 5m/s gusts, measured 1m above ground)	2m/s	Yes
Wind direction	N	Yes
Axial Wind Speed (For one direction testing limit 1 m/s)	0.1m/s	
Description of riding position:Normal riding		Yes





Paragraph	Parameter	Complies

**TEST
RESULTS**

TEST 1	LEFT	RIGHT
Trap 1	40.0km/h	40.5km/h
Trap 2	40.9km/h	40.2km/h
TEST 2		
Trap1	25.2km/h	25.5km/h
Trap 2	25.7km/h	25.3km/h

Average test result: Variant 5: 40.4km/h

Yes

Variant 6: 25.4km/h

Test result (rounded km/h)

Variant 5: 40km/h

Yes

Variant 6: 25km/h

Left runs all within 3%?

Yes

Right runs within 3%?

Yes





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TEST REPORT: Maximum torque and maximum net engine power of two or three wheel motor vehicles

Paragraph	Parameter	Complies
Test result within 5% of declared maximum speed?		Yes

Remarks

None

Note: VCA apply measurement uncertainty to calibrated items but not test results.



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TEST REPORT: MASSES AND DIMENSIONS OF TWO OR THREE WHEELED MOTOR VEHICLES

Directive 93/93/EC as amended by Directive 2004/86/EC

Regulation NA

REPORT/JOB NUMBER:	CWS381379
--------------------	-----------

TEST DETAILS

Location of Test	Nanchang Motorcycle Quality Inspection and Testing Institute
Date of Test	18 April 2017
VCA Representative	Huang Kaimin
Manufacturer's Representative	Xu Zhibin
Reason for Test	Extension of approval

MANUFACTURER DETAILS

Manufacturer's Name	Jiangsu Xinni E-Vehicle Co.,Ltd.
---------------------	----------------------------------

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TEST REPORT: MASSES AND DIMENSIONS OF TWO OR THREE**WHEELED MOTOR VEHICLES** Directive 93/93 as amended by

Directive 2004/86/EC

**Vehicle
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Manufacturer's Address	No.501,Xishan Road,Anzhen Town,Xishan, District,Wuxi City,Jiangsu,P.R.China
Model Type & description	HAWK
Category	L1e

CONCLUSION

The above mentioned vehicle was tested in accordance with EC Directive 93/93/EEC as last amended by 2004/86/EC and was found to comply in all respects

Signature:

Name: Du Song

Position: Test Engineer

Date: 28 April 2017

LIST OF ANNEXES

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TEST REPORT: MASSES AND DIMENSIONS OF TWO OR THREE

WHEELED MOTOR VEHICLES Directive 93/93 as amended by

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TEST REPORT: MASSES AND DIMENSIONS OF TWO OR THREE**WHEELED MOTOR VEHICLES** Directive 93/93 as amended by

Directive 2004/86/EC

**Vehicle
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Agency****TEST SPECIFICATION AND WORST CASE RATIONALE**

Two variants(Lead-acid batteries for both)

Tests required (if more than one is applicable):

- Masses and Dimensions

COMPONENT SPECIFICATION (as specified in agreed worse case rationale)

Yes

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 worse case rationale

Yes

FACILITY AND EQUIPMENT CHECKS1 Generic Risk assessment followed *Insert RA identifier here*

N/A

OR

Specific Risk assessment completed and stored in electronic job folder

N/A

TEST REPORT: MASSES AND DIMENSIONS OF TWO OR THREE**WHEELED MOTOR VEHICLES** Directive 93/93 as amended by

Directive 2004/86/EC

**Vehicle
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Agency**

- 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
TCS-300	10K2794	20 April 2017

TEST REPORT: MASSES AND DIMENSIONS OF TWO OR THREE**WHEELED MOTOR VEHICLES Directive 93/93 as amended by****Directive 2004/86/EC**

**Vehicle
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Manufacturer's documentation complete

Yes

VERIFICATION OF MASSES

Variant5,6

CONDITIONS OF THE VEHICLE					
MASSES (kg)	(a) UNLADEN	(b) IN RUNNING ORDER	(c) IN RUNNING ORDER PLUS RIDER	(d) MAX PAYLOAD	(e) MAX PERMISSIBLE
Declared FRONT AXLE		49	76		86
	As tested	49	49	76	
Declared REAR AXLE		77	125		190
	As tested	77	77	125	
Declared COMBINED	126	126	201	75	276
	As tested	126	126	201	

Percentage error between the declared and tested masses for the vehicle in running order {column (b)}:

TEST REPORT: MASSES AND DIMENSIONS OF TWO OR THREE**WHEELED MOTOR VEHICLES** Directive 93/93 as amended by

Directive 2004/86/EC

**Vehicle
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Agency****FRONT AXLE (Less than 5%)** 0 % Y**REAR AXLE (Less than 5%)** 0 % Y**COMBINATION** 0 % Y

Percentage error between the declared and tested masses for the vehicle in running order, together with the rider {column (c)}:

FRONT AXLE (Less than 5%) 0 % Y**REAR AXLE (Less than 5%)** 0 % Y**COMBINATION** 0 % Y

	Masses of the vehicle in running order {column (b) correspond to those declared by the manufacturer}	Y
--	--	---

	Masses of the vehicle in running order, together with the rider {column (c)} correspond to those declared by the manufacturer	Y
--	---	---

	The sum of the combined masses verified in columns (c) and (d) is equal to or less than the maximum mass stated by the	Y
--	--	---

TEST REPORT: MASSES AND DIMENSIONS OF TWO OR THREE**WHEELED MOTOR VEHICLES** Directive 93/93 as amended by

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	manufacturer	
--	--------------	--

	The sum of the technically permissible maximum masses of the axles is at least equal to the technically permissible mass of the vehicle	Y
--	---	---

3.2.4	Maximum mass of trailer, where applicable, is equal to or less than 50% of the unladen vehicle mass	N/A
-------	---	-----

2002/24 WV Unladen weight (declared a) for quadricycles is:

Not more than 350kg for light quadricycles**

N/A

Not more than 400kg for quadricycles**

N/A

** Batteries can be removed from unladen mass see 2002/24 Article 1

THREE-WHEEL MOTOR VEHICLES:

3.2.2.1	The combined mass in column (a) is equal to or less than 270 kg (mopeds)	N/A
---------	--	-----

3.2.2.1	The combined mass in column (a) is equal to or less than 1000 kg (tricycles**)	N/A
---------	--	-----

3.2.3.1	The combined mass in column (d) is equal to or less than 300 kg (mopeds)	N/A
---------	--	-----

TEST REPORT: MASSES AND DIMENSIONS OF TWO OR THREE**WHEELED MOTOR VEHICLES** Directive 93/93 as amended by

Directive 2004/86/EC

**Vehicle
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3.2.3.3.1	The combined mass in column (d) is equal to or less than 1500 kg (tricycles used for transport of goods)	N/A
-----------	--	-----

3.2.3.3.2	The combined mass in column (d) is equal to or less than 300 kg (tricycles used for transport of persons)	N/A
-----------	---	-----

FOUR-WHEEL MOTOR VEHICLES:

3.2.2.2	The combined mass in column (a) is equal to or less than 350 kg (light quadricycles)	N/A
---------	--	-----

3.2.2.2	The combined mass in column (a) is equal to or less than 400 kg (quadricycles other than light used for transport of persons)	N/A
---------	---	-----

3.2.2.2	The combined mass in column (a) is equal to or less than 550 kg (quadricycles** other than light used for transport of goods)	N/A
---------	---	-----

3.2.3.2	The combined mass in column (d) is equal to or less than 200 kg (light quadricycles)	N/A
---------	--	-----

3.2.3.4.1	The combined mass in column (d) is equal to or less than 1000 kg (quadricycles other than light used for transport of goods)	N/A
-----------	--	-----

TEST REPORT: MASSES AND DIMENSIONS OF TWO OR THREE**WHEELED MOTOR VEHICLES** Directive 93/93 as amended by

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3.2.3.4.2	The combined mass in column (d) is equal to or less than 200 kg (quadricycles other than light used for transport of persons)	N/A
-----------	---	-----

VERIFICATION OF DIMENSIONS

DIMENSIONS (mm)	Length	Width	Height
Declared	1850	710	1100
Measured	1850	710	1100

3.1.1.1	Length equal to or less than 4.00 m	Y
---------	-------------------------------------	---

3.1.1.2	Width equal to or less than 1.00 m (two-wheel moped)	Y
---------	--	---

3.1.1.2	2.00 m (other vehicles)	N/A
---------	-------------------------	-----

3.1.1.3	Height equal to or less than 2.50 m	Y
---------	-------------------------------------	---

Remarks

None

TEST REPORT: MASSES AND DIMENSIONS OF TWO OR THREE

WHEELED MOTOR VEHICLES Directive 93/93 as amended by

Directive 2004/86/EC



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Note: VCA apply measurement uncertainty to calibrated items but not test results.



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TEST REPORT: RADIO INTERFERENCE (ELECTROMAGNETIC COMPATIBILITY)

Directive 97/24/EC Chapter 8

REPORT/JOB NUMBER:	CWS381379
--------------------	-----------

TEST DETAILS

Subject	ELECTROMAGNETIC COMPATIBILITY
EC Directive	97/24 Chapter 8
ECE Regulation	N/A
Location of Test	Nanjing SIMEC EMC Lab Nanjing Rongce EMC Lab
Date of Test	31 March 2017
VCA Representative	Huang Kaimin
Manufacturer's Representative	Xu Zhibin
Reason for Test	Extension of approval

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**TEST REPORT: RADIO INTERFERENCE
(ELECTROMAGNETIC COMPATIBILITY)**

Directive 97/24/EC Chapter 8

MANUFACTURER DETAILS

Manufacturer's Name	Jiangsu Xinni E-Vehicle Co.,Ltd.
Manufacturer's Address	No.501,Xishan Road,Anzhen Town,Xishan, District,Wuxi City,Jiangsu,P.R.China
Model Type & description	HAWK
Category	L1e

CONCLUSION

The above mentioned vehicle was tested in accordance with EC Directive 97/24 chapter 8 and was found to comply in all respects

Signature:

Name: Du Song

Position: Type Approval Engineer

Date: 28 April 2017

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**TEST REPORT: RADIO INTERFERENCE
(ELECTROMAGNETIC COMPATIBILITY)**

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**TEST REPORT: RADIO INTERFERENCE
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TEST SPECIFICATION AND WORST CASE RATIONALE

Single specification

Note: VCA apply measurement uncertainty to calibrated items but not test results.

Tests required (if more than one is applicable)

- Broadband test
- Narrowband test
- Immunity test
-
-

COMPONENT SPECIFICATION (as specified in agreed worse case rationale)

Yes

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 worse case rationale

Yes

Complies
Yes/NA

FACILITY AND EQUIPMENT CHECKS

1 Generic Risk assessment followed *Insert RA identifier here*

N/A

OR

Specific Risk assessment completed and stored in electronic job folder

N/A

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



**TEST REPORT: RADIO INTERFERENCE
(ELECTROMAGNETIC COMPATIBILITY)**

Directive 97/24/EC Chapter 8

Equipment	Serial No.	Calibration data
EMI Test Receiver (Emission test)	ESPI	Valid to 31 March 2017
Antenna (Emission test)	JB6	Valid to 27 December 2017
High gain log-periodic antenna(0-1G) (Immunity test)	STLP9128D	Valid to 20 February 2018



**TEST REPORT: RADIO INTERFERENCE
(ELECTROMAGNETIC COMPATIBILITY)**

Directive 97/24/EC Chapter 8

TEST REQUIREMENTS

Complies Yes/NA

Vehicle corresponds to that agreed in worst-case meeting

Yes

EMISSIONS

Annex II & III 1.1	Measuring equipment complies with CISPR 16-1(93)	Yes
-----------------------------------	--	------------

Type and calibration date: refer to the table above

Yes

TEST LOCATION:

Annex II & III 3.1	O.A.T.S. Is level, clear area free from electromagnetic reflecting surfaces within a circle of minimum radius 30m	N/A
-----------------------------------	---	------------

Annex II & III 3.2	Measuring equipment within test site but only in permitted region (See Figure 1)	N/A
-----------------------------------	--	------------



**Vehicle
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**TEST REPORT: RADIO INTERFERENCE
(ELECTROMAGNETIC COMPATIBILITY)**

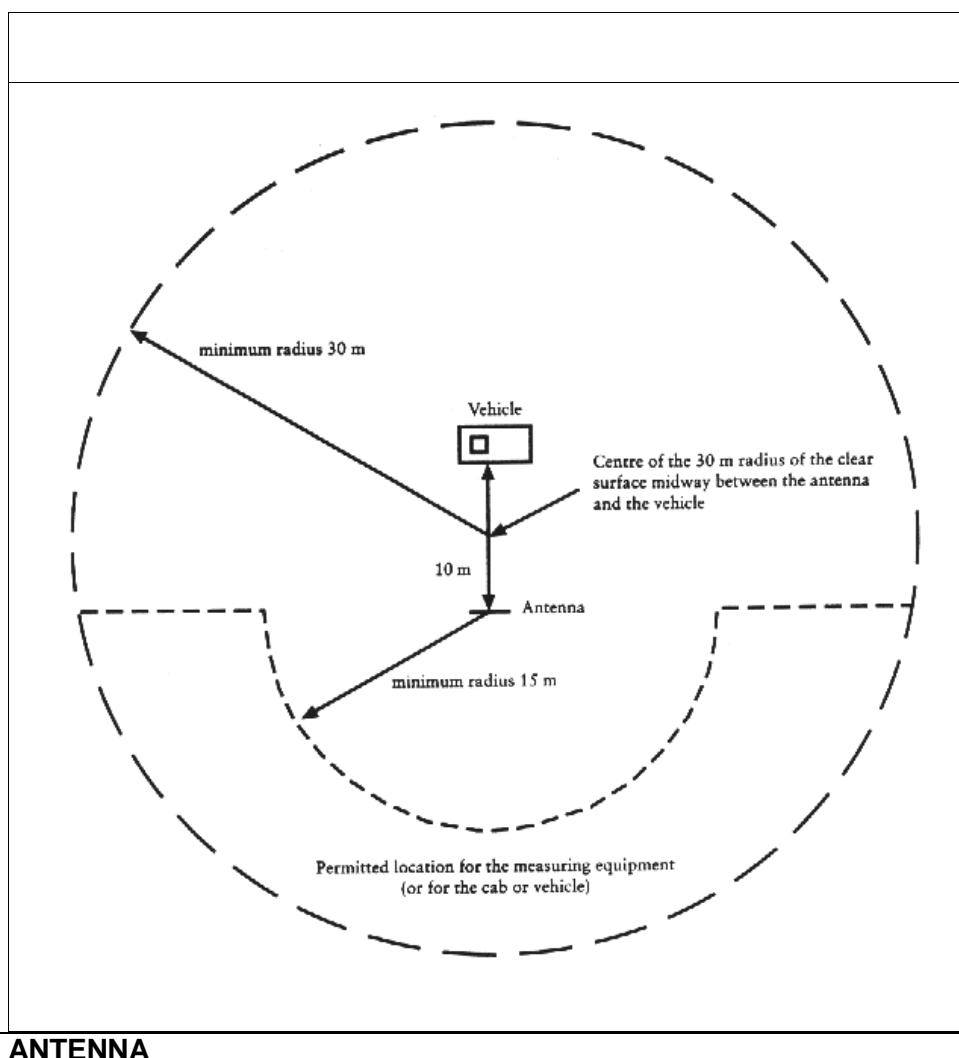
Directive 97/24/EC Chapter 8

<i>Annex II & III 3.4</i>	Ambient noise at least 10 dB below reference limits	N/A
-----------------------------------	---	-----



Figure 1 - Vehicle test surface

Clear horizontal surface free of electromagnetic reflection



ANTENNA



Annex II & III 5.1	Types and calibration dates: refer to the table above	Yes
--------------------	---	-----

Annex II & III 5.2.1. HEIGHT

5.2.1.

Annex II & III 5.2.1.1.	Tests at 10 m. The antenna phase mid-point must be $3,0 \pm 0,05$ m above the vehicle plane.	Yes
-------------------------	--	-----

Annex II & III 5.2.1.2.	Tests at 3 m. The antenna phase mid-point must be $1,8 \pm 0,05$ m above the vehicle plane.	N/A
-------------------------	---	-----

Annex II & III 5.2.2. MEASURING DISTANCE

Annex II & III 5.2.2.1.	Tests at 10 m. The horizontal distance from the antenna phase mid-point to the external surface of the vehicle must be $10,0 \pm 0,2$ m.	Yes
-------------------------	--	-----

Annex II & III 5.2.2.2.	Tests at 3 m. The horizontal distance from the antenna phase mid-point to the external surface of the vehicle must be $3,0 \pm 0,05$ m.	N/A
-------------------------	---	-----



--	--	--

<i>Annex II & III 5.2.1.3.</i>	Antenna's receiving elements no closer than 0.25m to the plane on which the vehicle rests	Yes
------------------------------------	---	------------

<i>Annex II & III 5.2.2.3.</i>	If enclosed test facility is used, antenna's receiving elements no closer than 1.0m to any radio absorbent material or closer than 1.5m to the wall of facility	Yes
------------------------------------	---	------------

<i>Annex II & III 5.2.2.3.</i>	No absorbent material between receiving antenna and vehicle	Yes
------------------------------------	---	------------

<i>Annex II & III 6.1</i>	Pre-test sweep supplied to show compliance throughout frequency range 30 to 1000 MHz	Yes
-------------------------------	--	------------

	Test frequencies chosen from pre-test data	Yes
--	--	------------

Annex VI **NARROWBAND TEST**



Vehicle
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**TEST REPORT: RADIO INTERFERENCE
(ELECTROMAGNETIC COMPATIBILITY)**

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Initial test carried out

Yes

Ignition switched on

Yes

Electronic systems in normal operating mode

Yes

Comments:

None

Detector used and bandwidth

Yes

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TEST REPORT: RADIO INTERFERENCE (ELECTROMAGNETIC COMPATIBILITY)

NARROWBAND TEST RESULTS-Not applicable

Frequency Range (MHz)	Frequency (MHz)	Left Hand Side		Right Hand Side		Correction Factor	Maximum Value dB (μ V/m)	Limit dB (μ V/m)
		Horizontal dB (μ V/m)	Vertical dB (μ V/m)	Horizontal dB (μ V/m)	Vertical dB (μ V/m)			

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30 – 45								
45 – 80								
80 - 130								
130 – 170								
170 – 225								
225 - 300								
300 - 400								
400 – 525								
525 – 700								
700 – 850								
850 - 1000								

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TEST REPORT: RADIO INTERFERENCE (ELECTROMAGNETIC COMPATIBILITY)

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Annex V BROADBAND TEST - SEE ANNEX 2 FOR TEST RESULTS

Engine is at normal operating temperature and running at correct speed

Yes

~~Single cylinder 2500rpm +/- 10%~~

~~> one cylinder 1500rpm +/- 10%~~

Electric motors 75% of maximum operating power

Speed setting mechanism not influencing electromagnetic radiation

Yes

Other sources of broadband noise at maximum current drain

Yes

List:

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Vehicle Certification Agency

TEST REPORT: RADIO INTERFERENCE (EL)

1. Headlamp lights up
2. Direction indicator lamps light up

Detector used and bandwidth: QP,120kHZ

Yes

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TEST REPORT: RADIO INTERFERENCE (ELECTROMAGNETIC COMPATIBILITY)

BROADBAND TEST RESULTS

Details of optional features fitted:

Frequency Suggested (MHz)	Frequency (MHz)	Left Hand Side		Right Hand Side		Correction Factor dB	Maximum Value dB	Limit dB
		Horizontal dB	Vertical dB	Horizontal dB	Vertical dB			
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	(μ V/m)						
45							
65							
90							
150							
180							
220							
300							
450							
600							
750							
900							

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TEST REPORT: RADIO INTERFERENCE (ELECTROMAGNETIC COMPATIBILITY)

Directive 97/24/EC Chapter 8

Annex IV IMMUNITY

TEST FACILITY DESIGNATION/NO: Nanjing Rongce

Yes

CALIBRATION: Date: refer to the table above

Yes

Annex IV 6.1.1.	Antenna type(s) and frequency range(s):	Yes
--------------------	---	-----

Annex IV 6.1.	Antenna polarization - Vertical	Yes
------------------	---------------------------------	-----

Annex IV 5.2.1.	Antenna height - 1.5m	Yes
--------------------	-----------------------	-----



Vehicle
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**TEST REPORT: RADIO INTERFERENCE
(ELECTROMAGNETIC COMPATIBILITY)**

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Annex IV 5.2.1.2	Antenna elements no closer than 0.25 m to plane on which vehicle rests	Yes
---------------------	--	-----

	and no closer than 1.0 m to any absorber	Yes
--	--	-----

Annex IV 5.2.2.2.	and no closer than 1.5 m to any wall	Yes
----------------------	--------------------------------------	-----

Annex IV 5.2.2.2.	No absorbent material between antenna and vehicle	Yes
----------------------	---	-----

Annex IV 5.4.	REFERENCE POINT	Yes
------------------	-----------------	-----

	- as Appendix 1 or 2 -	Yes
--	------------------------	-----

	- distance from antenna -2m	Yes
--	-----------------------------	-----

	- on vehicle centre line	Yes
--	--------------------------	-----



Vehicle
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**TEST REPORT: RADIO INTERFERENCE
(ELECTROMAGNETIC COMPATIBILITY)**

Directive 97/24/EC Chapter 8

Annex IV 5.4.1.3	- height $1.0 \pm 0.05\text{m}$ or $2.0 \pm 0.05\text{m}$ -	Yes
---------------------	---	-----

	Extraneous equipment in place during calibration	Yes
--	--	-----

Annex IV 7.1.2.	Forward power used to define test field	Yes
--------------------	---	-----

	OR another parameter directly related	N/A
--	---------------------------------------	-----

	Calibration steps $\leq 2\%$ of previous frequency	Yes
--	--	-----

Annex IV 7.2.1.	Field strength contour minimum 50% of nominal in minimum 80% of calibration steps	Yes
--------------------	---	-----

TEST ARRANGEMENTS

4.1	Vehicle	Yes
-----	---------	-----

4.1.1	- unladen except test equipment	Yes
-------	---------------------------------	-----



**TEST REPORT: RADIO INTERFERENCE
(ELECTROMAGNETIC COMPATIBILITY)**

Directive 97/24/EC Chapter 8

- on appropriately loaded dynamometer

N/A

- OR insulated axle stands

Yes

4.1.2 - headlights on dipped beam

Yes

4.1.3 - left or right direction indicator flashing

Yes

4.1.4 - all other systems which affect driver's control on as in normal operation of vehicle

Yes

4.1.5 - no connections to test area

Yes

- reports for other systems attached

N/A

4.3 - only non-perturbing monitoring equipment

Yes

4.4 - facing antenna on centre line

Yes

- OR other (state position)



**TEST REPORT: RADIO INTERFERENCE
(ELECTROMAGNETIC COMPATIBILITY)**

Directive 97/24/EC Chapter 8

5.3.2 Antenna elements no closer than 0.5m to outer body surface of vehicle

N/A

5.3.3 TLS \geq 75% of length of vehicle

N/A

7.1.2 Antenna and test equipment layout to the same specification as for calibration

Yes

Pre-test sweep supplied to show compliance throughout frequency range 20 to 1000 MHz

Yes

Test frequencies chosen from pre-test data

Yes

Test signal dwell time sufficient (minimum 2 seconds)

Yes

Vehicle speed: 40 km/h gear

Yes

Modulated test signal peak value equals unmodulated sine wave peak value whose test limits are defined in paragraph 5.4.2 of Annex I (For Modulation, carrier wave power is reduced by 5.1 dB to conserve peaks)

Yes



**TEST REPORT: RADIO INTERFERENCE
(ELECTROMAGNETIC COMPATIBILITY)**

Directive 97/24/EC Chapter 8

VEHICLE IMMUNITY TEST RESULTS –

Frequency Suggested (MHz)	Frequency (MHz)	Forward Power		Output level		Field Strength (V/m)
		Cal. (W)	Test (W)	Cal. (dBm)	Test (dBm)	
27						
45						
65						
90						
150						
180						
220						
300						
450						
600						
750						
900						

Annex I 5.4.2.2.	No malfunction at 30 V/m or below	Yes
---------------------	-----------------------------------	-----



<i>Annex I</i> 5.4.2.1.	Malfunction between 25 and 30 V/m over less than 10% of 20 to 1000 MHz frequency band	Yes
	Tests not performed at chamber resonant frequencies	Yes

Report Information-1

EUT Description: Broadband

Test Description: 10m vehicle BB

Graph-10m vehicle BB LH



**TEST REPORT: RADIO INTERFERENCE
(ELECTROMAGNETIC COMPATIBILITY)**

Directive 97/24/EC Chapter 8



Test Data

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Ant_F (dB/m)	PA_G (dB)	Cab_L (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree
1	33.6000	44.95	QP	12.10	45.65	0.93	12.33	32.00	-19.67	300	180
2	36.2000	53.03	QP	11.63	45.65	0.98	19.99	32.00	-12.01	300	180
3	54.5200	53.04	QP	9.70	46.68	1.27	17.33	32.00	-14.67	300	180



4	62.1200	47.17	QP	9.74	47.43	1.33	10.81	32.00	-21.19	300	180
5	99.6000	57.22	QP	12.00	46.52	1.62	24.32	33.86	-9.54	300	180
6	100.1200	55.55	QP	12.13	46.50	1.62	22.80	33.90	-11.10	300	180
7	146.5600	52.40	QP	12.48	47.98	2.07	18.97	36.40	-17.43	300	180
8	193.8000	65.59	QP	13.02	46.94	2.24	33.91	38.24	-4.33	300	180
9	225.0400	58.15	QP	14.27	47.70	2.39	27.11	39.22	-12.11	300	180
10	322.8400	57.67	QP	16.69	48.71	2.88	28.53	41.59	-13.06	300	180
11	442.6400	45.98	QP	16.00	49.16	3.37	16.19	43.00	-26.81	300	180
12	674.0800	42.21	QP	22.10	47.48	4.17	21.00	43.00	-22.00	300	180
13	724.6000	42.39	QP	22.55	45.62	4.32	23.64	43.00	-19.36	300	180
14	945.1200	45.40	QP	23.78	45.94	4.95	28.19	43.00	-14.81	300	180

Report Information-2

EUT Description: **Broadband**

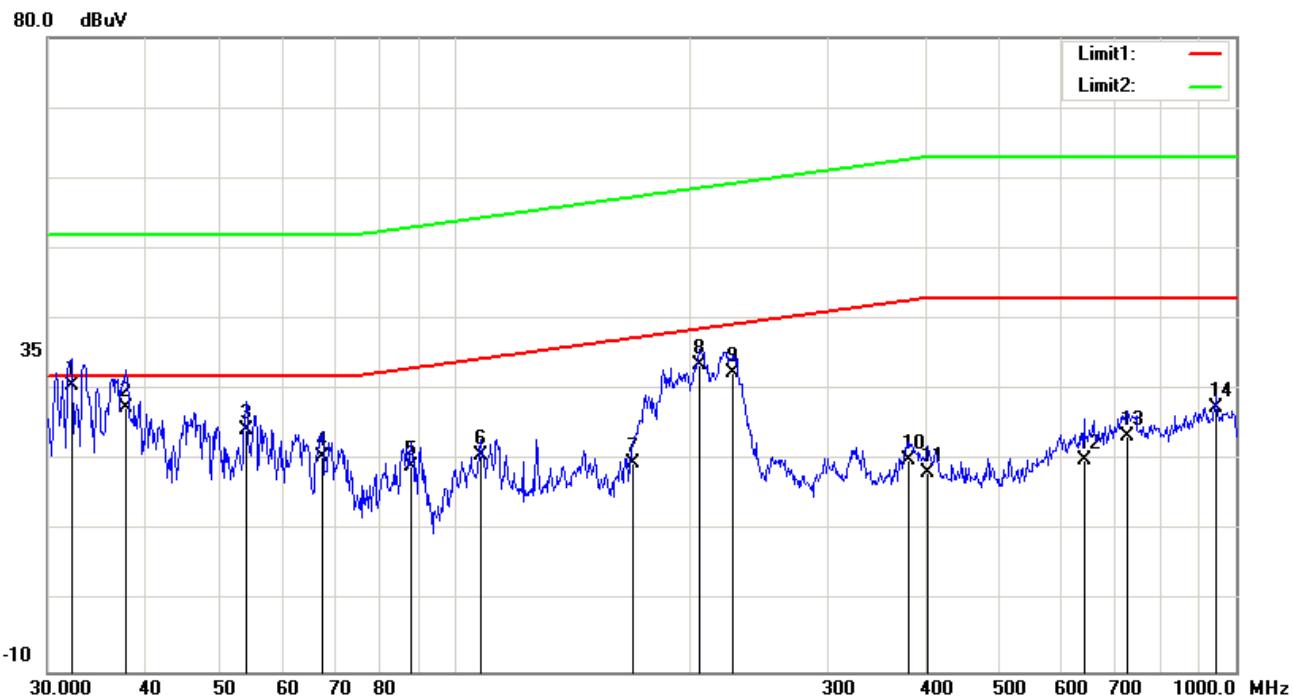
Test Description: **10m vehicle BB**

Graph-10m vehicle BB LV



**TEST REPORT: RADIO INTERFERENCE
(ELECTROMAGNETIC COMPATIBILITY)**

Directive 97/24/EC Chapter 8



Test Data

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Ant_F (dB/m)	PA_G (dB)	Cab_L (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree
1	32.2000	55.05	QP	20.32	45.66	0.91	30.62	32.00	-1.38	300	180
2	37.9200	55.04	QP	16.99	45.67	1.01	27.37	32.00	-4.63	300	180
3	54.0000	61.19	QP	8.57	46.65	1.27	24.38	32.00	-7.62	300	180



4	67.4400	57.00	QP	9.78	47.76	1.40	20.42	32.00	-11.58	300	180
5	87.9600	56.31	QP	8.66	47.22	1.49	19.24	33.05	-13.81	300	180
6	107.7200	52.13	QP	13.25	46.30	1.67	20.75	34.38	-13.63	300	180
7	168.8400	49.91	QP	14.28	46.58	2.09	19.70	37.33	-17.63	300	180
8	206.1200	63.77	QP	14.86	47.49	2.29	33.43	38.64	-5.21	300	180
9	227.6400	62.87	QP	14.88	47.63	2.40	32.52	39.30	-6.78	300	180
10	381.8400	48.99	QP	16.63	48.78	3.15	19.99	42.69	-22.70	300	180
11	402.3600	46.99	QP	16.96	48.95	3.24	18.24	43.00	-24.76	300	180
12	640.1200	41.78	QP	21.19	46.97	4.06	20.06	43.00	-22.94	300	180
13	727.6800	42.36	QP	22.30	45.52	4.33	23.47	43.00	-19.53	300	180
14	945.2400	44.85	QP	23.65	45.95	4.95	27.50	43.00	-15.50	300	180

Report Information-3

EUT Description: **Broadband**

Test Description: **10m vehicle BB**

Graph-10m vehicle BB RH



**TEST REPORT: RADIO INTERFERENCE
(ELECTROMAGNETIC COMPATIBILITY)**

Directive 97/24/EC Chapter 8



Test Data

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Ant_F (dB/m)	PA_G (dB)	Cab_L (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree
1	33.1200	50.52	QP	12.18	45.65	0.93	17.98	32.00	-14.02	300	0
2	36.7600	52.78	QP	11.53	45.65	0.99	19.65	32.00	-12.35	300	0
3	45.7600	49.89	QP	10.34	46.08	1.17	15.32	32.00	-16.68	300	0



4	67.1600	46.10	QP	10.37	47.74	1.40	10.13	32.00	-21.87	300	0
5	99.8800	52.06	QP	12.07	46.51	1.62	19.24	33.88	-14.64	300	0
6	113.2800	50.14	QP	15.34	46.34	1.72	20.86	34.71	-13.85	300	0
7	165.6000	48.63	QP	12.33	46.84	2.08	16.20	37.20	-21.00	300	0
8	193.5600	60.81	QP	13.01	46.93	2.23	29.12	38.23	-9.11	300	0
9	230.2800	56.21	QP	14.45	47.57	2.41	25.50	39.37	-13.87	300	0
10	309.5200	51.30	QP	16.81	48.47	2.82	22.46	41.31	-18.85	300	0
11	403.2800	50.15	QP	16.00	48.95	3.24	20.44	43.00	-22.56	300	0
12	625.3600	41.70	QP	21.55	46.97	4.01	20.29	43.00	-22.71	300	0
13	740.4400	41.45	QP	22.64	45.11	4.37	23.35	43.00	-19.65	300	0
14	946.1200	40.36	QP	23.81	45.97	4.95	23.15	43.00	-19.85	300	0

Report Information-4

EUT Description: Broadband

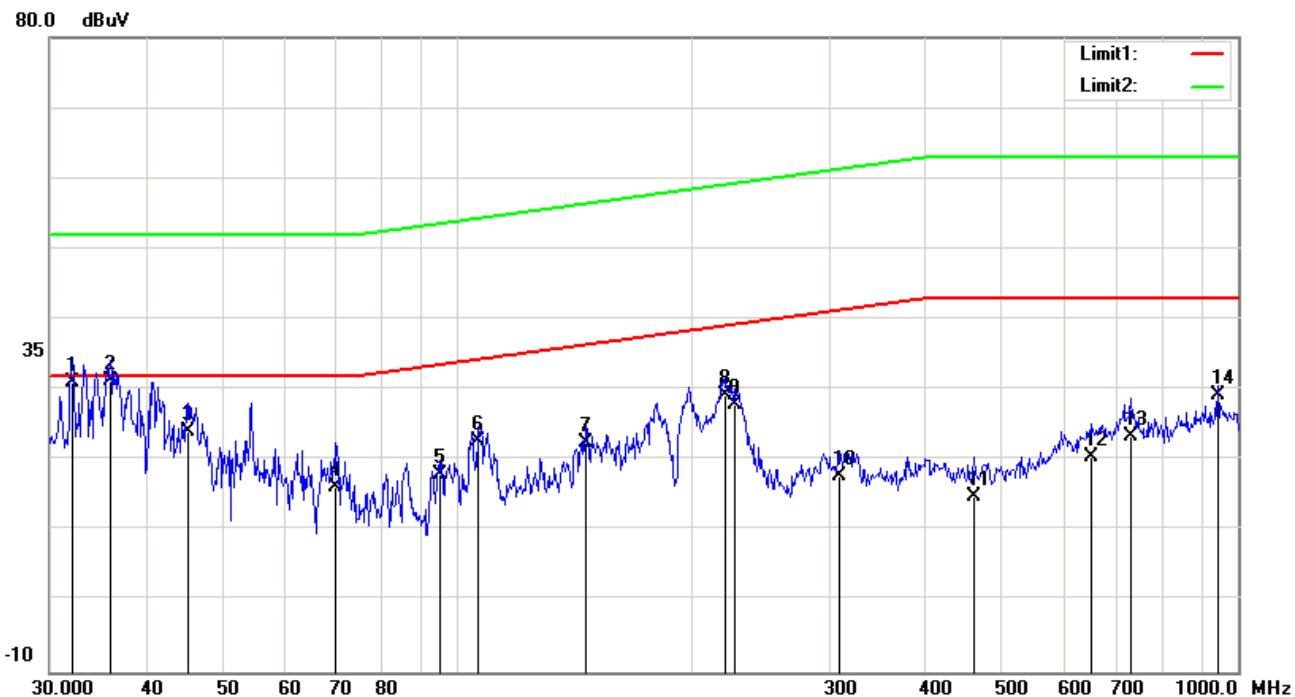
Test Description: 10m vehicle BB

Graph-10m vehicle BB RV



**TEST REPORT: RADIO INTERFERENCE
(ELECTROMAGNETIC COMPATIBILITY)**

Directive 97/24/EC Chapter 8



Test Data

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Ant_F (dB/m)	PA_G (dB)	Cab_L (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree
1	32.1200	55.42	QP	20.37	45.66	0.91	31.04	32.00	-0.96	300	0
2	35.9200	57.76	QP	18.15	45.64	0.98	31.25	32.00	-0.75	300	0
3	45.0800	56.57	QP	12.36	46.02	1.15	24.06	32.00	-7.94	300	0



4	69.8800	52.20	QP	10.42	47.87	1.44	16.19	32.00	-15.81	300	0
5	95.2000	53.00	QP	10.09	46.70	1.56	17.95	33.57	-15.62	300	0
6	106.6000	54.52	QP	12.94	46.33	1.66	22.79	34.31	-11.52	300	0
7	146.3600	54.97	QP	13.42	47.98	2.06	22.47	36.39	-13.92	300	0
8	220.4800	59.94	QP	14.87	47.81	2.36	29.36	39.09	-9.73	300	0
9	226.9600	58.21	QP	14.88	47.65	2.40	27.84	39.28	-11.44	300	0
10	309.7600	48.40	QP	15.15	48.47	2.82	17.90	41.32	-23.42	300	0
11	460.2000	44.55	QP	15.99	49.17	3.43	14.80	43.00	-28.20	300	0
12	647.5600	42.64	QP	21.37	47.72	4.09	20.38	43.00	-22.62	300	0
13	731.9200	42.19	QP	22.26	45.38	4.34	23.41	43.00	-19.59	300	0
14	945.2000	46.52	QP	23.65	45.95	4.95	29.17	43.00	-13.83	300	0

Report Information-5

EUT Description: Narrowband

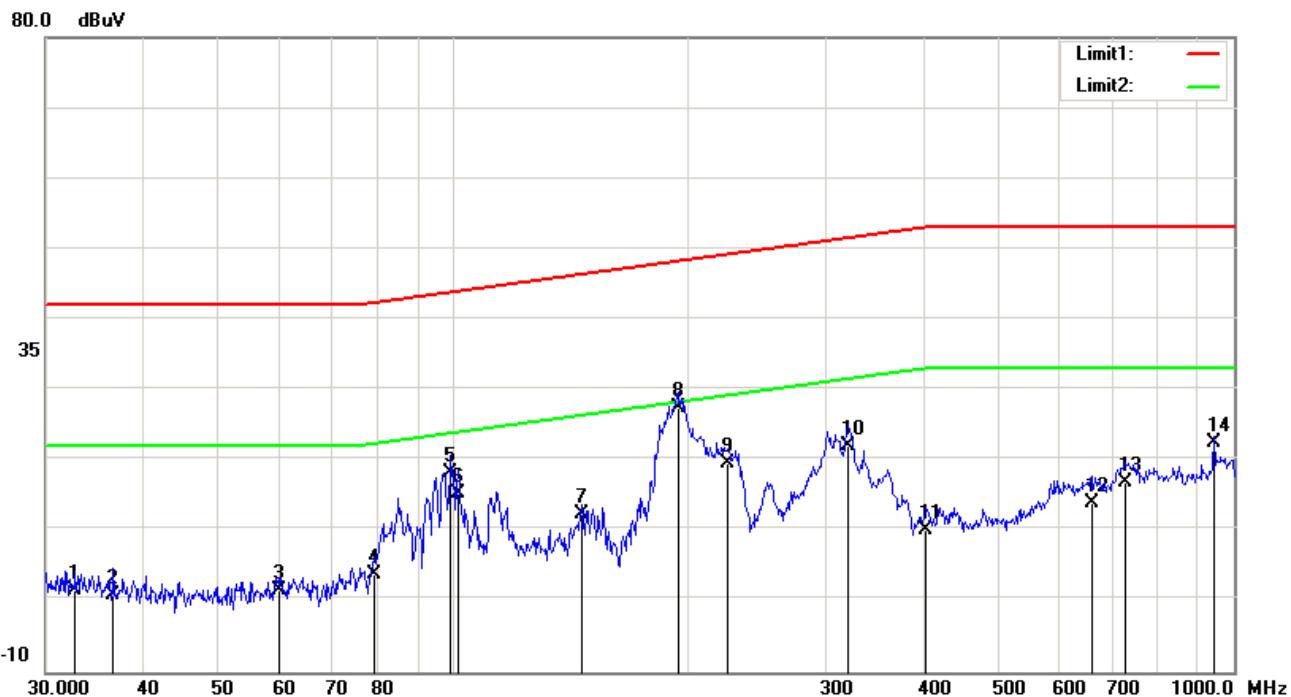
Test Description: 10m vehicle NB

Graph-10m vehicle NB LH



**TEST REPORT: RADIO INTERFERENCE
(ELECTROMAGNETIC COMPATIBILITY)**

Directive 97/24/EC Chapter 8



Test Data

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Ant_F (dB/m)	PA_G (dB)	Cab_L (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree
1	32.8000	34.01	AVG	12.24	45.66	0.92	1.51	22.00	-20.49	300	180
2	36.6400	34.08	AVG	11.55	45.65	0.99	0.97	22.00	-21.03	300	180
3	59.6800	38.00	AVG	9.49	47.24	1.30	1.55	22.00	-20.45	300	180



4	79.5200	40.51	AVG	9.59	47.79	1.44	3.75	22.38	-18.63	300	180
5	99.4800	51.14	AVG	11.98	46.52	1.61	18.21	23.86	-5.65	300	180
6	101.6000	47.64	AVG	12.56	46.46	1.63	15.37	23.99	-8.62	300	180
7	146.3200	45.92	AVG	12.45	47.98	2.06	12.45	26.39	-13.94	300	180
8	193.9600	59.12	AVG	13.03	46.95	2.24	27.44	28.24	-0.80	300	180
9	225.1600	50.54	AVG	14.27	47.69	2.39	19.51	29.22	-9.71	300	180
10	320.6400	51.29	AVG	16.71	48.69	2.86	22.17	31.55	-9.38	300	180
11	403.3200	39.89	AVG	16.00	48.95	3.24	10.18	33.00	-22.82	300	180
12	657.8400	36.66	AVG	21.92	48.74	4.12	13.96	33.00	-19.04	300	180
13	728.5600	35.48	AVG	22.57	45.49	4.33	16.89	33.00	-16.11	300	180
14	945.2000	39.78	AVG	23.78	45.95	4.95	22.56	33.00	-10.44	300	180

Report Information-6

EUT Description: Narrowband

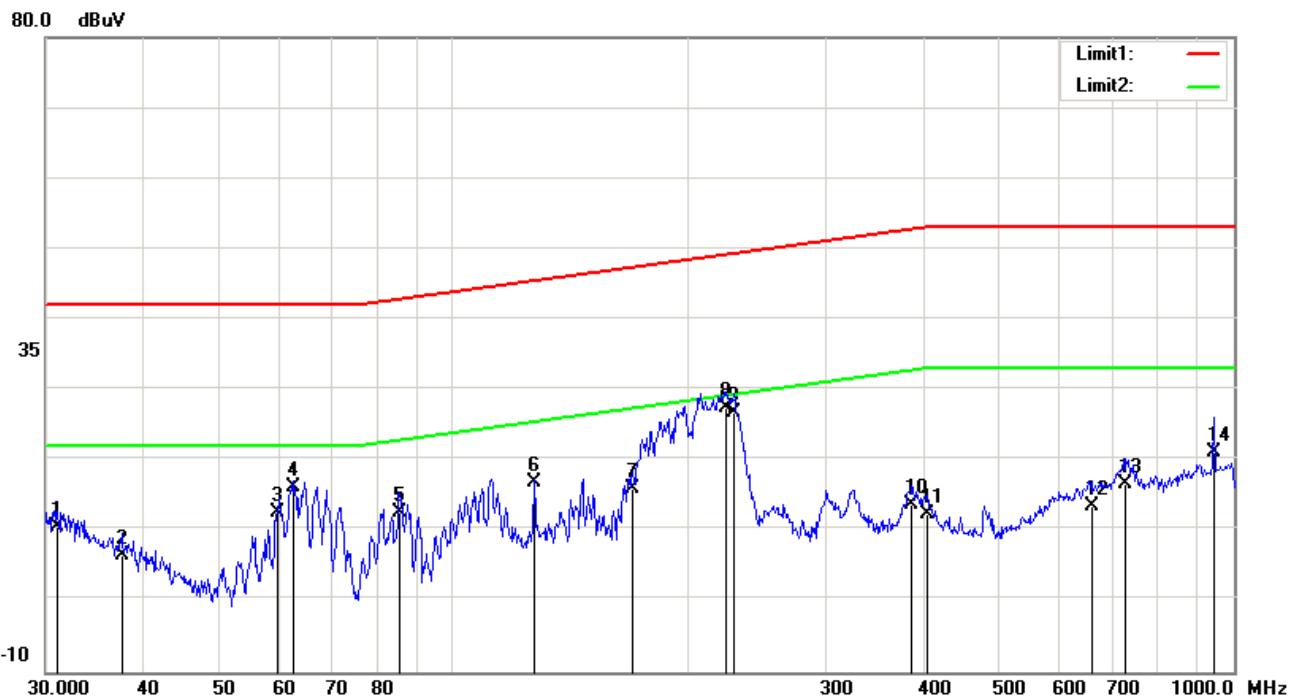
Test Description: 10m vehicle NB

Graph-10m vehicle NB LV



**TEST REPORT: RADIO INTERFERENCE
(ELECTROMAGNETIC COMPATIBILITY)**

Directive 97/24/EC Chapter 8



Test Data

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Ant_F (dB/m)	PA_G (dB)	Cab_L (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree
1	31.0800	34.42	AVG	20.97	45.68	0.89	10.60	22.00	-11.40	300	180
2	37.5600	33.98	AVG	17.20	45.67	1.01	6.52	22.00	-15.48	300	180
3	59.6400	50.69	AVG	7.88	47.24	1.30	12.63	22.00	-9.37	300	180



4	62.2800	53.86	AVG	8.44	47.44	1.33	16.19	22.00	-5.81	300	180
5	85.5200	50.34	AVG	8.26	47.47	1.47	12.60	22.86	-10.26	300	180
6	126.8800	46.01	AVG	16.20	47.07	1.84	16.98	25.45	-8.47	300	180
7	169.6000	45.99	AVG	14.36	46.52	2.09	15.92	27.36	-11.44	300	180
8	223.8000	57.92	AVG	14.87	47.73	2.38	27.44	29.18	-1.74	300	180
9	229.2000	57.01	AVG	14.88	47.59	2.41	26.71	29.34	-2.63	300	180
10	387.9600	42.71	AVG	16.75	48.83	3.18	13.81	32.80	-18.99	300	180
11	405.0000	41.21	AVG	16.92	48.96	3.25	12.42	33.00	-20.58	300	180
12	658.7200	36.62	AVG	21.63	48.83	4.12	13.54	33.00	-19.46	300	180
13	728.4800	35.50	AVG	22.29	45.49	4.33	16.63	33.00	-16.37	300	180
14	945.2400	38.61	AVG	23.65	45.95	4.95	21.26	33.00	-11.74	300	180

Report Information-7

EUT Description: Narrowband

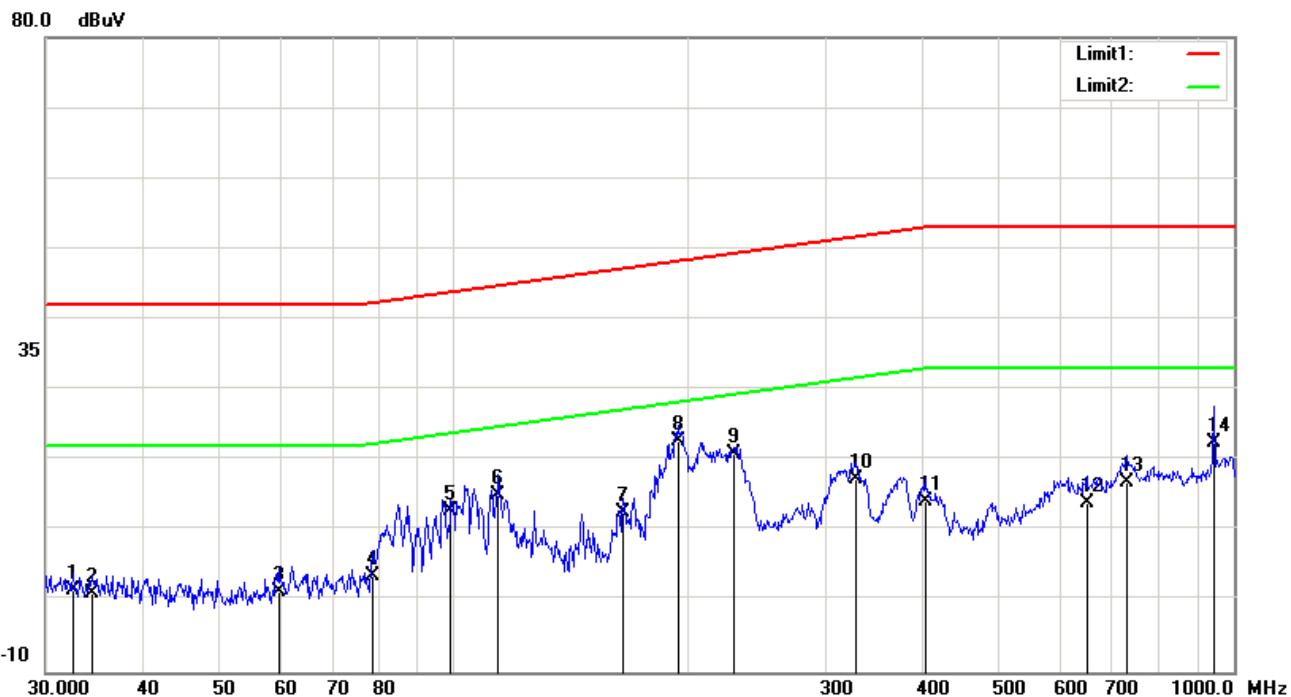
Test Description: 10m vehicle NB

Graph-10m vehicle NB RH



**TEST REPORT: RADIO INTERFERENCE
(ELECTROMAGNETIC COMPATIBILITY)**

Directive 97/24/EC Chapter 8



Test Data

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Ant_F (dB/m)	PA_G (dB)	Cab_L (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree
1	32.5600	34.10	AVG	12.28	45.66	0.92	1.64	22.00	-20.36	300	0
2	34.4400	33.91	AVG	11.95	45.64	0.95	1.17	22.00	-20.83	300	0
3	59.6800	37.76	AVG	9.49	47.24	1.30	1.31	22.00	-20.69	300	0



4	78.9600	40.42	AVG	9.65	47.81	1.44	3.70	22.34	-18.64	300	0
5	99.4400	45.70	AVG	11.97	46.52	1.61	12.76	23.85	-11.09	300	0
6	114.3600	44.37	AVG	15.46	46.38	1.72	15.17	24.77	-9.60	300	0
7	165.2400	44.96	AVG	12.34	46.87	2.08	12.51	27.19	-14.68	300	0
8	194.0400	54.46	AVG	13.04	46.96	2.24	22.78	28.25	-5.47	300	0
9	228.9200	51.75	AVG	14.41	47.60	2.41	20.97	29.33	-8.36	300	0
10	328.7200	46.51	AVG	16.64	48.78	2.90	17.27	31.71	-14.44	300	0
11	402.2000	43.90	AVG	16.00	48.94	3.24	14.20	33.00	-18.80	300	0
12	648.2000	35.87	AVG	21.81	47.78	4.09	13.99	33.00	-19.01	300	0
13	731.6000	35.36	AVG	22.59	45.39	4.34	16.90	33.00	-16.10	300	0
14	945.2400	39.66	AVG	23.79	45.95	4.95	22.45	33.00	-10.55	300	0

Report Information-8

EUT Description: Narrowband

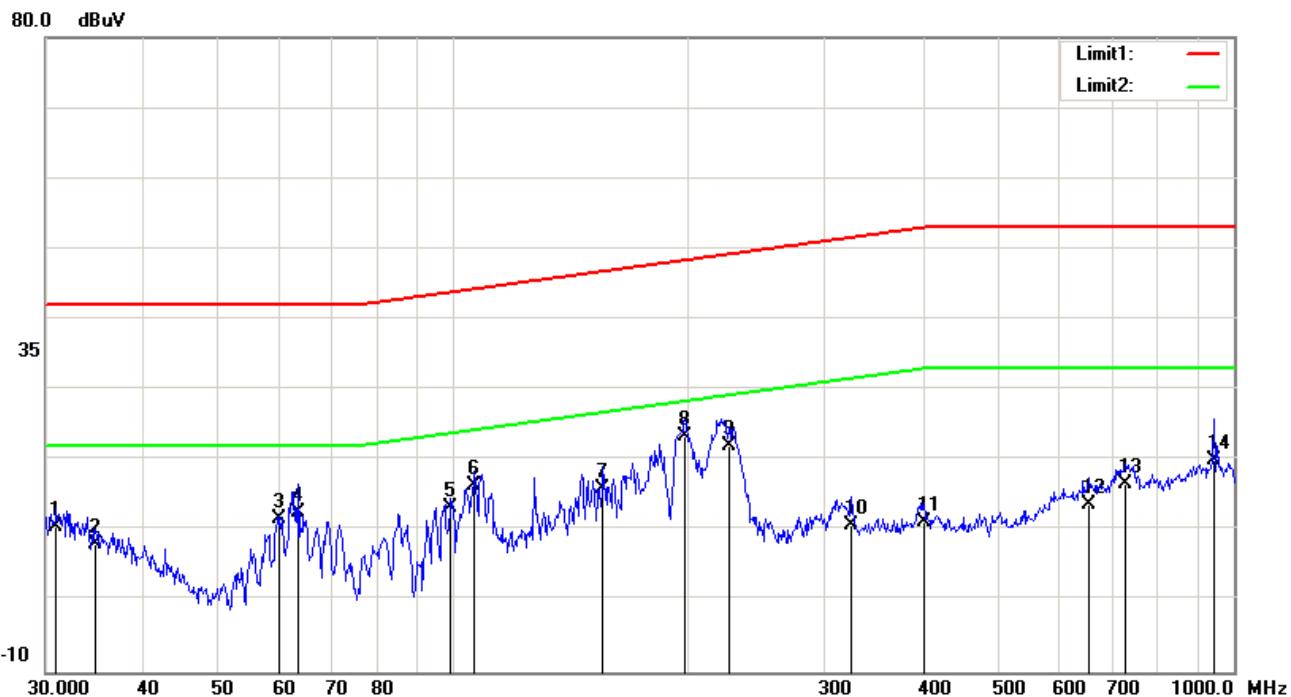
Test Description: 10m vehicle NB

Graph-10m vehicle NB RV



**TEST REPORT: RADIO INTERFERENCE
(ELECTROMAGNETIC COMPATIBILITY)**

Directive 97/24/EC Chapter 8



Test Data

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Ant_F (dB/m)	PA_G (dB)	Cab_L (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree
1	31.0000	34.40	AVG	21.02	45.68	0.89	10.63	22.00	-11.37	300	0
2	34.8400	33.99	AVG	18.78	45.63	0.96	8.10	22.00	-13.90	300	0
3	59.9200	49.79	AVG	7.85	47.27	1.30	11.67	22.00	-10.33	300	0



**TEST REPORT: RADIO INTERFERENCE
(ELECTROMAGNETIC COMPATIBILITY)**

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4	63.4400	50.12	AVG	8.74	47.53	1.35	12.68	22.00	-9.32	300	0
5	99.3200	47.20	AVG	10.97	46.53	1.61	13.25	23.85	-10.60	300	0
6	106.5200	48.22	AVG	12.92	46.33	1.66	16.47	24.31	-7.84	300	0
7	155.7200	47.90	AVG	13.61	47.58	2.08	16.01	26.80	-10.79	300	0
8	198.1200	54.08	AVG	14.40	47.22	2.25	23.51	28.38	-4.87	300	0
9	225.5200	52.44	AVG	14.88	47.68	2.39	22.03	29.23	-7.20	300	0
10	323.8800	41.11	AVG	15.44	48.72	2.88	10.71	31.61	-20.90	300	0
11	401.2400	40.02	AVG	16.98	48.94	3.23	11.29	33.00	-21.71	300	0
12	653.0000	36.35	AVG	21.49	48.26	4.10	13.68	33.00	-19.32	300	0
13	727.5200	35.49	AVG	22.30	45.52	4.33	16.60	33.00	-16.40	300	0
14	945.1200	37.41	AVG	23.65	45.94	4.95	20.07	33.00	-12.93	300	0

Remarks

None

Note: VCA apply measurement uncertainty to calibrated items but not test results.



Vehicle
Certification
Agency

**TEST REPORT: RADIO INTERFERENCE
(ELECTROMAGNETIC COMPATIBILITY)**

Directive 97/24/EC Chapter 8

TR/M/C/EWVTA ITEM 36/00

Revision 6

30 March 2017

Report/Job Number:CWS381379

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UK
Approval
Authority
Certification
Agency

23-May-17



Vehicle Certification Agency

VCA, 1 Eastgate Office Centre,
Eastgate Road, Bristol, BS5 6XX, United Kingdom
enquiries@vca.gov.uk | www.dft.gov.uk/vca | +44(0) 300 330 5797

Report Number: CWS381379

Issue: 0

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Test Report: Identification of Controls, Tell-tales and Indicators for Two and Three Wheel Motor Vehicles

Legislation

EC Directive 2009/80/EC

Test Details

Location of Test: Nanchang Motorcycle Quality Inspection and Testing Institute
Date of Test: 18 April 2017
VCA Representative(s): Huang Kaimin
Manufacturer's Representative(s): Xu Zhibin
Reason for Test Report: Extension of approval

Manufacturer Details

Name and Address: Jiangsu Xinri E-Vehicle Co.,Ltd.
No.501,Xishan Road,Anzhen Town,Xishan, District,Wuxi
City,Jiangsu,P.R.China
Type: HAWK
Commercial Description: See information document
Category: L1e

Conclusion

The above mentioned vehicle was tested in accordance with the above mentioned legislation and was found to comply in all respects.

Signature:

Signature:

Name: Du Song
Position: Type Approval Engineer
Date: 28 April 2017

List of Annexes

Annex	No of Pages	Subject
I		
II		





Vehicle Certification Agency

VCA, 1 Eastgate Office Centre,
Eastgate Road, Bristol, BS5 6XX, United Kingdom
enquiries@vca.gov.uk | www.dft.gov.uk/vca | +44(0) 300 330 5797

Report Number: CWS381379

Issue: 0

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Worst Case Rationale

Single specification

Note: Include information on variants and versions this report covers, as applicable

Tests Required

Yes, NA, See Report ... / Approval ... / Annex ...

Designation and Identification of Symbols:

See report

Vehicle Specification

Vehicle Identification Number:

Variant 5:☆LXRBA0GW4H0900101☆

Variant 6:☆LXRBA0GX0H0900001☆

Manufacturer's Documentation

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

Yes

Facility and Equipment Checks

Calibration certificates checked and valid, recorded in the following table:

N/A

Equipment	Serial / Certificate No.	Calibration due*

*Specify calibrated date + (interval) or calibration due date.



Vehicle Certification Agency

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Eastgate Road, Bristol, BS5 6XX, United Kingdom
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Report Number: CWS381379

Issue: 0

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Complies
Yes / NA

Test Requirements

Designation and Identification of Symbols

Ann I

Where fitted, the controls, tell-tales and indicators are identified by the symbols designated for them in Annex I.

Yes



*Framed areas
may be solid*

Figure 1: Main Beam Headlamp

Control and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.

Yes

Requirement	Control	Tell-tale
Fitted	Yes	[Required]
Symbol (o)n or (c)lose to device	On	On
Illumination/Colour	No requirement	Blue

Note: Symbol with four lines is also acceptable.

Remarks:

None

Figure 2: Dipped Beam Headlamp

Control and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.

Yes



*Framed areas
may be solid*

Requirement	Control	Tell-tale
Fitted	Yes	No
Symbol (o)n or (c)lose to device	On	No
Illumination/Colour	No requirement	Green

Note: Symbol with four lines is also acceptable.

Remarks:

Dipped beam light up automatically

Figure 3: Direction Indicator

Control and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.

Yes



*Framed areas
may be solid*

Requirement	Control	Tell-tale
Fitted	Yes	[Required, unless audible warning fitted]
Symbol (o)n or (c)lose to device	C	On
Illumination/Colour	No requirement	Green

Note: The pair of arrows is a single symbol. When the controls or tell-tales for left and right-turn operate independently, however, the two arrows may be considered separate symbols and be spaced accordingly.

Remarks:

None





Vehicle Certification Agency

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Report Number: CWS381379

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Figure 4: Hazard Warning Device



Framed areas
may be solid

Control and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.

N/A

Requirement	Control	Tell-tale
Fitted	No	[Required]
Symbol (o)n or (c)lose to device	No	No
Illumination/Colour	Mandatory	Red

Note: Tell-tale is not required when arrows of the direction indicator tell-tales that otherwise operate independently flash simultaneously as hazard warning tell-tale.

Remarks:

Figure 5: Choke



Control and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.

N/A

Requirement	Control	Tell-tale
Fitted		
Symbol (o)n or (c)lose to device		
Illumination/Colour	No requirement	Amber

Remarks:

Figure 6: Audible Warning Device



Outline is also
permitted

Control is visible, clear and has the correct symbol and illumination, as detailed below.

Yes

Requirement	Control
Fitted	Yes
Symbol (o)n or (c)lose to device	On
Illumination	No requirement

Remarks:

None

Figure 7: Fuel Level



Outline is also
permitted

Indicator and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.

N/A

Requirement	Indicator	Tell-tale
Fitted		
Symbol (o)n or (c)lose to device		
Illumination/Colour	Mandatory	Amber



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Report Number: CWS381379

Issue: 0

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Remarks:



Figure 8: Engine Coolant Temperature

Indicator and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.

N/A

Requirement	Indicator	Tell-tale
Fitted		
Symbol (o)n or (c)lose to device		
Illumination/Colour	Mandatory	Red

Remarks:

Figure 9: Battery Charge

Indicator and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.

Yes



Requirement	Indicator	Tell-tale
Fitted	Yes	Yes
Symbol (o)n or (c)lose to device	On	On
Illumination/Colour	Mandatory	Red

Remarks:

None

Figure 10: Engine Oil

Indicator and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.

N/A



Requirement	Indicator	Tell-tale
Fitted		
Symbol (o)n or (c)lose to device		
Illumination/Colour	Mandatory	Red

Remarks:



Figure 11: Front Fog Lamps

Control and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.

N/A

Requirement	Control	Tell-tale
Fitted		





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Issue: 0

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Framed areas may be solid	Symbol (o)n or (c)lose to device		
	Illumination/Colour	No requirement	Green

Remarks:



Framed areas
may be solid

Figure 12: Rear Fog Lamps

Control and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.

N/A

Requirement	Control	Tell-tale
Fitted		[Required]
Symbol (o)n or (c)lose to device		
Illumination/Colour	No requirement	Amber

Remarks:

Figure 13: Engine Ignition Cut-off in 'Out of Use' Position

Control is visible, clear and has the correct symbol and illumination, as detailed below.

Yes



Requirement	Control
Fitted	Yes
Symbol (o)n or (c)lose to device	On
Illumination	Mandatory

Remarks:

Figure 14: Engine Ignition Cut-off in 'Operating' Position

Control is visible, clear and has the correct symbol and illumination, as detailed below.

Yes



Requirement	Control
Fitted	Yes
Symbol (o)n or (c)lose to device	On
Illumination	No requirement

Remarks:

Figure 15: Lighting Switch



Control and/or tell-tale are visible, clear, and have the correct symbol, illumination and colour, as detailed below.

Yes



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Report Number: CWS381379

Issue: 0

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Framed areas
may be solid

Requirement	Control	Tell-tale
Fitted	Yes	[Required]
Symbol (o)n or (c)lose to device	On	No
Illumination/Colour	No requirement	Green

Remarks: None

Figure 16: Position (Side) Lamps

Control and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.

Yes


Framed areas
may be solid

Requirement	Control	Tell-tale
Fitted	Yes	[Required]
Symbol (o)n or (c)lose to device	On	Via panel lights
Illumination/Colour	Not required	Green

Note: Control may be identified by Figure 15.

Tell-tale not required if instrument panel lights are lit automatically on activation of the lighting switch.

Remarks: None

Figure 17: 'Gearbox in Neutral' Indicator

Tell-tale is visible, clear and has the correct symbol and colour, as detailed below.

N/A



Requirement	Tell-tale
Fitted	
Symbol (o)n or (c)lose to device	
Colour	Green

Remarks:

Figure 18: Electric Starter

Control is visible, clear and has the correct symbol and illumination, as detailed below.

N/A



Requirement	Control
Fitted	
Symbol (o)n or (c)lose to device	
Illumination	No requirement

Remarks: None





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Report Number: CWS381379

Issue: 0

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Vehicle specification includes controls, tell-tales or indicators not listed in Annex I.

Yes

Details:

1. Odometer-indicator -on speedometer display
2. Gear shift(high and low)- Control
3. Blue tooth -on speedometer display

Symbol(s) used does not cause confusion with those listed in Annex I.

Yes

Remarks

None

Note: VCA apply measurement uncertainty to calibrated items but not test results.

Test Report: Whole Vehicle Type Approval for Two or Three Wheel Vehicles and Quadricycles

Legislation

EC Directive 2002/24/EC as amended by Directive 2013/60/EU

Test Details

Location of Test: Nanchang Motorcycle Quality Inspection and Testing Institute
Date of Test: 24-25 November 2016
VCA Representative(s): Du Song
Manufacturer's Representative(s): Mr. Yu
Reason for Test Report: New approval / ~~Extension of approval / Test report only~~

Manufacturer Details

Name and Address: Jiangsu Xinri E-Vehicle Co.,Ltd.
No.501, Xishan Road, Anzhen Town, Xishan District, Wuxi
City, Jiangsu, P.R.China
Type: HAWK
Commercial Description: Refer to manufacturer's documentation
Category: L1e

Conclusion

The above mentioned vehicle was tested in accordance with the above mentioned legislation and was found to comply in all respects.

Signature:



Name: Du Song
Position: Type Approval Engineer
Date: 12 December 2016

List of Annexes

Annex	No of Pages	Subject
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VCA, 1 Eastgate Office Centre,
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Report Number: CWS378045

Issue: 0

Worst Case Rationale

New approval, Four variants

Vehicle Specification

Vehicle Identification Number:

Variant 1: ☆LXRBE0GW1H0901369☆

Variant 2: ☆LXRBE0GX4H0900001☆

Variant 3: ☆LXRBE0GY3H0900001☆

Variant 4: ☆LXRBE0GZ2H0900001☆

Variant/Version:

00

Manufacturer's Documentation

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

Yes



Directive	Subject	Test Report Number or Reasoning for Exception	Complies
95/1	Maximum Torque and Maximum Net Engine Power; Maximum Design Speed of the Vehicle	CWS378045	Yes
97/24 (C7)	Anti-tampering Measures for Mopeds and Motorcycles	CWS378045	Yes
97/24 (C6)	Fuel Tank	N/A	N/A
93/93	Masses and Dimension	CWS378045	Yes
97/24 (C10)	Coupling Devices and their Attachment	N/A	N/A
97/24 (C5)	Anti-air Pollution Measures	N/A	N/A
97/24 (C1)	Tyres	CWS378045	Yes
93/14	Braking System	CWS378045	Yes
2009/67	Installation of Lighting and Light Signalling Devices on the Vehicle	CWS378045	Yes
97/24 (C2)	Lighting and Light Signalling Devices on the Vehicle	N/A	N/A
93/30	Audible Warning Device	CWS378045	Yes
2009/62	Position for the Mounting of Rear Registration Plate	CWS378045	Yes
97/24 (C8)	Electromagnetic Compatibility	CWS378045	Yes
97/24 (C9)	Sound Level and Exhaust System	N/A	N/A
97/24 (C4)	Rear view Mirrors	CWS378045	Yes
97/24 (C3)	External Projections	CWS378045	Yes
2009/78	Stand	CWS378045	Yes
93/33	Devices to Prevent Unauthorised Use of the Vehicle	CWS378045	Yes
97/24 (C12)	Windows; Windscreen Wipers; Windscreen Washers; Devices for De-icing and De-misting for Three Wheel Mopeds, Motor Tricycles and Quadricycles with Bodywork	N/A	N/A
2009/79	Passenger Handhold	CWS378045	Yes
97/24 (C11)	Anchorage Points for Safety Belts and Safety Belts for Three Wheel Mopeds, Motor Tricycles and Quadricycles with Bodywork	N/A	N/A
2000/7	Speedometer	CWS378045	Yes



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Report Number: CWS378045

Issue: 0

2009/80	Identification of Controls, Tell-tales and Indicators	CWS378045	Yes
2009/139	Statutory Inscriptions	CWS378045	Yes

Remarks

None

Note: VCA apply measurement uncertainty to calibrated items but not test results.





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TEST REPORT: Maximum torque and maximum net engine power and maximum speed of two or three wheel motor vehicles

95/1/EC – 2002/41/EC (Annex II) Engine power

REPORT/JOB NUMBER: CWS378045

TEST DETAILS

Subject	Maximum torque and maximum net engine power and maximum speed of two or three wheel motor vehicles (Mopeds and light quadricycles only)
EC Directive	95/1/EC – 2002/41/EC
ECE Regulation	N/A
Location of Test	Nanchang Motorcycle Quality Inspection and Testing Institute
Date of Test	24 November 2016
VCA Representative	Du Song
Manufacturer's Representative	Mr. Yu
Reason for Test	New approval

MANUFACTURER DETAILS

Manufacturer's Name	Jiangsu Xinri E-Vehicle Co.,Ltd.
Manufacturer's Address	No.501, Xishan Road, Anzhen Town, Xishan District, Wuxi City, Jiangsu, P.R.China
Model Type & description	HAWK
Category	L1e

CONCLUSION

The above mentioned vehicle was tested in accordance with 95/1/EC – 2002/41/EC and was found to comply in all respects

Signature:
Name: Du Song
Position: Test Engineer
Date: 12 December 2016

LIST OF ANNEXES

ANNEX	NO OF PAGES	SUBJECT
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TEST REPORT: Maximum torque and maximum net engine power of two or three wheel motor vehicles

Paragraph	Parameter	Complies												
TEST SPECIFICATION/WORST CASE RATIONALE: Four variants, Variant3,4 in lighter weight as test samples to cover variant1,2														
1	Risk assessment completed and stored in job folder	N/A												
2	Facilities and test equipments are appropriate	Yes												
3	Calibration certificates checked and valid, recorded below													
<table border="1"><thead><tr><th>Equipment</th><th>Serial No.</th><th>Calibration data</th></tr></thead><tbody><tr><td>VBOX</td><td>VBOXII</td><td>Valid to 10 October 2017</td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></tbody></table>			Equipment	Serial No.	Calibration data	VBOX	VBOXII	Valid to 10 October 2017						
Equipment	Serial No.	Calibration data												
VBOX	VBOXII	Valid to 10 October 2017												
4	3.1.1 Check of manufacturers documentation	Yes												
	Total running hours prior to test	hrs												
10	Table 1 Standard intake system fitted	Yes												
	Standard exhaust system fitted	Yes												
<table border="1"><tr><td>Air intake temperature measurement within 150 mm of air cleaner inlet</td><td>Yes</td></tr><tr><td>Exhaust back pressure measurement within 150 mm of engine exhaust outlet</td><td>N/A</td></tr><tr><td>Fan fitted</td><td>No</td></tr><tr><td>Remarks</td><td>None</td></tr></table>			Air intake temperature measurement within 150 mm of air cleaner inlet	Yes	Exhaust back pressure measurement within 150 mm of engine exhaust outlet	N/A	Fan fitted	No	Remarks	None				
Air intake temperature measurement within 150 mm of air cleaner inlet	Yes													
Exhaust back pressure measurement within 150 mm of engine exhaust outlet	N/A													
Fan fitted	No													
Remarks	None													
4	3.4, 3.5 Cold start device fitted, type	Manual												
	Permitted auxiliaries fitted:	N/A												
10	5.1 1)	Model:												
	2)	Model:												
	3)	Model:												

Paragraph	Parameter	Complies												
10 5.1.2 Other auxiliaries fitted:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">1)</td> <td style="width: 40%; background-color: #e0f2e0;"></td> <td style="width: 50%;">Model:</td> <td style="width: 50%; background-color: #e0f2e0;"></td> </tr> <tr> <td>2)</td> <td style="background-color: #e0f2e0;"></td> <td>Model:</td> <td style="background-color: #e0f2e0;"></td> </tr> <tr> <td>3)</td> <td style="background-color: #e0f2e0;"></td> <td>Model:</td> <td style="background-color: #e0f2e0;"></td> </tr> </table> Power absorbed details available for auxiliaries	1)		Model:		2)		Model:		3)		Model:		N/A
1)		Model:												
2)		Model:												
3)		Model:												

Test Equipment Details

2	2.1 Dynamometer make:	Tianjin KEDA	
	Type:	ACD-5.5	
	Model:	ACD-5.5	
	Serial Number:	N/A	
	Calibration date:	2016-09-18	
	2.2 Tachometer:	T3-1	
	2.4 Temperature gauges:	CWK6003	
	2.6 Pressure gauges:	N/A	
	2.5 Barometer:	ZBY215-84	
	2.3 Fuel measuring Device:	Hangzhou Zhongcheng	
	Type:	CS960	
	Exhaust volume:	N/A	
3.3.7	Water outlet temperature:		N/A
3.3.9	Oil temperature at	Sump	95
	Weight of fuel used for consumption test:	Not measured	g
	Volume of fuel used for consumption test:		N/A
	All test equipment correctly positioned:		Yes

Paragraph	Parameter	Complies
Fuel and Lubricant		
6	Make of Fuel: <small>(Fuel complies with emissions reference fuel standard for at least RON, MON, Density, Calorific value)</small>	SINOPEC
10	3.3.12 Specification of fuel: Specific gravity at 15°C	EU2000 0.725 kg/l
6	Cetane MON	85
	Lower Calorific Value	44.5 MJ/kg
10	Table II	All engine setting in accordance with manufacturers specifications
10	3.3.2 Adequate air supply available: Lubricant make: Lubricant specification: Lubricant SAE viscosity: Atmospheric Conditions:	MOBIL SF 15W/40
4	4.2.2.1 Barometric pressure: Ambient air temperature: Dry barometric pressure (ps): Air Intake Temperature (t): Cubic capacity: Number of cylinders:	101.9 kPa 30 °C N/A kPa 28 °C 0.0495 litres 4
	Layout of cylinders: 2 or 4 stroke:	S 4 stroke
	Fuel feed:	Via Carburettor
	Declared net power:	2.2 kW @ 5600 rpm
	Measured net power:	2.2 kW @ 6409 rpm

Paragraph	Parameter	Complies
Measured power within % of declared power: 10% mopeds <1 kW 5% mopeds >1 kW 5% motorcycles <11 kW 2% motorcycles >11 kW Speed tolerance 1.5%		Yes
Declared net torque:	3.3 Nm @ 5600 rpm	
Measured net torque:	3.3 Nm @ 5600 rpm	
Measured Torque within % of declared torque: 10% mopeds <1 kW 5% mopeds >1 kW Speed tolerance 1.5%		Yes Yes
Idle speed	1600 rpm	
Atmospheric correction factor $\alpha_1 = 1.0167$ (between 0.93 to 1.07)		Yes
Transmission correction factor $\alpha_2 = 1.084$		Yes



TEST REPORT: Maximum torque and maximum net engine power of two or three wheel motor vehicles

<i>Paragraph</i>	<i>Parameter</i>	<i>Complies</i>
Maximum speed		
Manufacturers Declared Maximum Speed	Variant1,3:45km/h Variant2,4:25km/h	Yes
Engine Number:	XR3000W72V	Yes
Mass in running order with rider: Variant3,4	Front: 70 Kg Rear: 99 Kg	Yes Yes
Transmission and gearbox		N/A
Final Drive Ratio:		N/A
Tyres:	Front:110/70-12 Rear:120/70-12	Yes Yes
Tyre Pressures kPa:	Front 225 kPa Rear 225 kPa	Yes Yes
Rider Weight (75 +/-2kg):	75 kg	Yes
Rider Height (1.75 +/-0.02m)	1.73cm	Yes
Atmospheric Conditions:		
Atmospheric pressure (limit 87 to 107 kPa)	101.7kPa	Yes
Temperature (limit 5 to 35 °C)	13°C	Yes
Relative Humidity (limit 30 to 90 %)	40 %	Yes
Wind Speed (limit av 3 m/s 5m/s gusts, measured 1m above ground)	1.7m/s	Yes
Wind direction	SW	Yes
Axial Wind Speed (For one direction testing limit 1 m/s)	0.1m/s	
Description of riding position: Normal riding position		Yes

TEST

TR/M/C/EWVTA ITEM 18/00

Revision 1
15 May 2012

Report/Job Number:CWS378045
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23-May-17



TEST REPORT: Maximum torque and maximum net engine power of two or three wheel motor vehicles

Paragraph	Parameter	Complies
RESULTS		
TEST 1	LEFT	RIGHT
Trap 1	44.43km/h	44.55km/h
Trap 2	46.61km/h	46.22km/h
TEST 2		
Trap1	24.71km/h	25.20km/h
Trap 2	24.60km/h	24.91km/h
Average test result:	Variant1,3:45.45km/h Variant2,4:24.85km/h	Yes
Test result (rounded km/h)	Variant1,3: 46. km/h Variant2,4:25km/h	Yes
Left runs all within 3%?		Yes
Right runs within 3%?		Yes
Test result within 5% of declared maximum speed?		Yes





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REPORT/JOB NUMBER: CWS378045

TEST DETAILS

Location of Test	Nanchang Motorcycle Quality Inspection and Testing Institute
Date of Test	24 November 2016
VCA Representative(s)	Du Song
Manufacturer's Representative(s)	Mr. Yu
Reason for Test	New approval

MANUFACTURER DETAILS

Manufacturer's Name	Jiangsu Xinri E-Vehicle Co.,Ltd.
Manufacturer's Address	No.501, Xishan Road, Anzhen Town, Xishan District, Wuxi City, Jiangsu, P.R.China
Model Type & description	HAWK
Category	L1e

CONCLUSION

The above mentioned vehicle/component was tested in accordance with EC Directive 97/24/EC Chapter 7 and was found to comply in all respects

Signature:
Name: Du Song
Position: Type Approval Engineer
Date: 12 December 2016

LIST OF ANNEXES

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**TEST REPORT: SUBJECT**

Directive 97/24/EC Chapter 7

Regulation xx.yy

TEST SPECIFICATION AND WORST CASE RATIONALE

Four variants

Tests required (if more than one is applicable)

Anti-tampering

COMPONENT SPECIFICATION (as specified in agreed worse case rationale)

Yes

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 worse case rationale

 Yes**FACILITY AND EQUIPMENT CHECKS**

- | | | | | |
|---|--|----------------------------------|----------------------|-----|
| 1 | Generic Risk assessment followed
OR
Specific Risk assessment completed and stored in electronic job folder | <i>Insert RA identifier here</i> | <input type="text"/> | N/A |
| 2 | Facilities and test equipment are appropriate
Brief description of test equipment: | | <input type="text"/> | N/A |
| 3 | Calibration certificates checked and valid, recorded in the following table | | <input type="text"/> | N/A |



TEST REQUIREMENTS

		Complies Yes/NA
App 1	Manufacturers Information document according to Appendix 1	Yes
1.3	Vehicle category for anti tampering: A = moped B = upto 125cc & upto 11kW C = upto 25 kW upto 0.16 kW/kg (power/mass in running order) D = other than A,B, or C	Yes N/A N/A N/A
2.1	Interchangeability of parts does not cause increase of more than: 5km/h maximum speed (Category A) 10% maximum power (Category B) Manufacturers declaration received <i>Parts covered:</i> 2 stroke engines: Cylinder/piston combination, carburettor, intake pipe, exhaust system. 4 stroke engines: Cylinder head, camshaft, cylinder/piston combination, carburettor, intake pipe, exhaust.	Yes N/A Yes Yes
2.2	Declaration that modifications to fuel feed and ignition do increase: Moped maximum speed by more than 5 km/h Motorcycle maximum power by more than 10%	Yes N/A

Maximum speed and power must still comply with vehicle category

2.3	Category B Motorcycles	
2.3.1	- Non-removable sleeve in intake fitted (60HRC <4mm thick) and - Intake attached with tamperproof fixing and - Intake marked with B	N/A
	OR	
2.3.2	- Intake restrictor fitted and location marked on outside (<4mm thick or 5mm if rubber) and - Intake attached with tamperproof fixing and - Intake marked with B	N/A
	OR	
2.3.3	- Restriction is in the cylinder head and - Cylinder head marked with B	N/A
2.3.5	Diameter of restriction shown on drawing and the manufacturer confirms that restrictor is the critical part	N/A

3 Additional requirements for category A and B vehicles



Mandatory only if needed to prevent increase of moped speed (>5km/h) or motorcycle power (>10%)

3.1	Cylinder head gasket thickness when mounted Mopeds < 1.3mm Motorcycles < 1.6mm	Yes N/A
3.2	Cylinder – crankcase gasket when mounted < 0.5mm (2 strokes)	N/A
3.3	2 strokes: Piston at TDC must not cover inlet port	N/A
3.4	2 strokes: Rotating the piston by 180 ⁰ must not increase power	N/A
3.5	No artificial restriction in exhaust system	No
3.6	Effective length of exhaust is not determined by removable parts	Yes
3.7	Engine load limiter (e.g. Throttle control or twist grip stops) not fitted? (Forbidden).	No
3.8	Electric/electronic speed restrictor fitted to Category A vehicles? (If yes manufacturer must show its modification or removal does not result in a speed increase of > 10%).	N/A
	Spark cut or inhibit system? (Forbidden if they result in HC emissions or increase in fuel consumption)	N/A
	Ignition advance device does not cause a difference of >10% when disconnected	Yes
3.9	Reed valves fitted with tamperproof bolts	Yes
3.10	Markings on parts Parts marked in a visible and durable way (labels are OK if they are destroyed by removal).	Yes
	Marking is at least 2.5mm high (letters/figures/symbols)	Yes
	Intake silencer (air filter) marked:	N/A
	Carburettor (or equivalent) marked:	N/A
	Inlet pipe if it is a separate part marked: (B if category B vehicle)	N/A
	Cylinder:	N/A
	Cylinder head:	N/A
	Crankcase:	Yes
		Variant1:XR3000W72V1750001 Variant2:XR3000W72V1750002 Variant3:XR3000W72V1750003 Variant4:XR3000W72V1750002



23-May-17



TEST REPORT: SUBJECT
Directive 97/24/EC Chapter 7
Regulation xx.yy

Exhaust pipe: (if separate from silencer)	N/A
Catalytic converter (If not integrated into silencer):	N/A
Silencer:	N/A
Transmission: (output gear number of teeth)	N/A
Transmission: (rear wheel gear number of teeth)	N/A
Electrical or electronic devices for the engine: (ECU, CDI etc)	Variant1 :XRZWK72V35A(V1.0) Variant2:XRZWK72V35A(V1.1) Variant3:XRZWK72V35A(V1.2) Variant4:XRZWK72V35A(V1.3)
Restricted section:	Yes
	N/A

3.10.2 Anti tampering control plate

3.10.2.1	Plate is/has: At least 60 x 40mm Fixed to the vehicle in a durable manor Readily accessible for inspection Markings are at least 2.5mm high	Riveted plate/sticker	Yes Yes Yes Yes Yes
3.10.3.3	Follows example in figure 1		
Plate shows: (Not applicable items can be omitted) Manufacturers trade name or mark Vehicle anti tampering category: A Final gear ratio teeth/diameter (item 9 and 10) Code or part numbers (other items)			Yes Yes Yes N/A

Remarks (if possible): None





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TEST REPORT: MASSES AND DIMENSIONS OF TWO OR THREE WHEELED MOTOR VEHICLES

Directive 93/93/EC as amended by Directive 2004/86/EC
Regulation NA

REPORT/JOB NUMBER: CWS378045

TEST DETAILS

Location of Test Nanchang Motorcycle Quality Inspection and Testing Institute
Date of Test 24 November 2016
VCA Representative Du Song
Manufacturer's Representative Mr. Yu
Reason for Test New approval

MANUFACTURER DETAILS

Manufacturer's Name Jiangsu Xinri E-Vehicle Co.,Ltd.
Manufacturer's Address No.501, Xishan Road, Anzhen Town, Xishan District, Wuxi City, Jiangsu, P.R.China
Model Type & description HAWK
Category L1e

CONCLUSION

The above mentioned vehicle was tested in accordance with EC Directive 93/93/EEC as last amended by 2004/86/EC and was found to comply in all respects

Signature:

Name: Du Song
Position: Test Engineer
Date: 12 December 2016

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**TEST REPORT: MASSES AND
DIMENSIONS OF TWO OR THREE
WHEELED MOTOR VEHICLES**
Directive 93/93 as amended by
Directive 2004/86/EC
Regulation NA

L

TEST SPECIFICATION AND WORST CASE RATIONALE

Four variants

Tests required (if more than one is applicable):

- Masses and dimensions

COMPONENT SPECIFICATION (as specified in agreed worse case rationale)

Yes

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 worse case rationale

Yes

FACILITY AND EQUIPMENT CHECKS

1	Generic Risk assessment followed	<i>Insert RA identifier here</i>	<input type="text"/>	N/A
	OR			
	Specific Risk assessment completed and stored in electronic job folder		<input type="text"/>	N/A
2	Facilities and test equipment are appropriate		<input type="text"/>	Yes
	Brief description of test equipment:		<input type="text"/>	<input type="text"/>
3	Calibration certificates checked and valid, recorded in the following table		<input type="text"/>	Yes

Equipment	Serial No.	Calibration data
TCS300	10K2794	2016-04-20





**TEST REPORT: MASSES AND
DIMENSIONS OF TWO OR THREE
WHEELED MOTOR VEHICLES**
Directive 93/93 as amended by
Directive 2004/86/EC
Regulation NA

Manufacturer's documentation complete

Yes

VERIFICATION OF MASSES

Variant1,2

CONDITIONS OF THE VEHICLE					
MASSES (kg)	(a) UNLADEN	(b) IN RUNNING ORDER	(c) IN RUNNING ORDER PLUS RIDER	(d) MAX PAYLOAD	(e) MAX PERMISSIBLE
Declared FRONT AXLE As tested		49	76		86
	49	49	76		
Declared REAR AXLE As tested		77	125		190
	77	77	125		
Declared COMBINED As tested	126	126	201	75	276
	126	126	201		

Variant3,4

CONDITIONS OF THE VEHICLE					
MASSES (kg)	(a) UNLADEN	(b) IN RUNNING ORDER	(c) IN RUNNING ORDER PLUS RIDER	(d) MAX PAYLOAD	(e) MAX PERMISSIBLE
Declared FRONT AXLE As tested		38	70		76
	38	38	70		
Declared REAR AXLE As tested		56	99		168
	56	56	99		
Declared COMBINED As tested	94	94	169	75	244
	94	94	169		

Percentage error between the declared and tested masses for



**TEST REPORT: MASSES AND
DIMENSIONS OF TWO OR THREE
WHEELED MOTOR VEHICLES**
Directive 93/93 as amended by
Directive 2004/86/EC
Regulation NA

the vehicle in running order {column (b)}:

FRONT AXLE (Less than 5%)	0	%	Y
REAR AXLE (Less than 5%)	0	%	Y
COMBINATION	0	%	Y

Percentage error between the declared and tested masses for the vehicle in running order, together with the rider {column (c)}:

FRONT AXLE (Less than 5%)	0	%	Y
REAR AXLE (Less than 5%)	0	%	Y
COMBINATION	0	%	Y

	Masses of the vehicle in running order {column (b) correspond to those declared by the manufacturer}	Y
	Masses of the vehicle in running order, together with the rider {column (c)} correspond to those declared by the manufacturer	Y
	The sum of the combined masses verified in columns (c) and (d) is equal to or less than the maximum mass stated by the manufacturer	Y
	The sum of the technically permissible maximum masses of the axles is at least equal to the technically permissible mass of the vehicle	Y
3.2.4	Maximum mass of trailer, where applicable, is equal to or less than 50% of the unladen vehicle mass	N/A

2002/24 WV Unladen weight (declared a) for quadricycles is:

Not more than 350kg for light quadricycles**

Not more than 400kg for quadricycles**

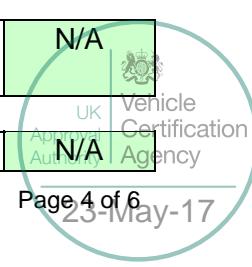
** Batteries can be removed from unladen mass see 2002/24 Article 1

N/A

N/A

THREE-WHEEL MOTOR VEHICLES:

3.2.2.1	The combined mass in column (a) is equal to or less than 270 kg (mopeds)	N/A
3.2.2.1	The combined mass in column (a) is equal to or less than 1000	N/A





**TEST REPORT: MASSES AND
DIMENSIONS OF TWO OR THREE
WHEELED MOTOR VEHICLES**
Directive 93/93 as amended by
Directive 2004/86/EC
Regulation NA

	kg (tricycles**)	
--	------------------	--

3.2.3.1	The combined mass in column (d) is equal to or less than 300 kg (mopeds)	N/A
3.2.3.3.1	The combined mass in column (d) is equal to or less than 1500 kg (tricycles used for transport of goods)	N/A
3.2.3.3.2	The combined mass in column (d) is equal to or less than 300 kg (tricycles used for transport of persons)	N/A

FOUR-WHEEL MOTOR VEHICLES:

3.2.2.2	The combined mass in column (a) is equal to or less than 350 kg (light quadricycles)	N/A
3.2.2.2	The combined mass in column (a) is equal to or less than 400 kg (quadricycles other than light used for transport of persons)	N/A
3.2.2.2	The combined mass in column (a) is equal to or less than 550 kg (quadricycles** other than light used for transport of goods)	N/A
3.2.3.2	The combined mass in column (d) is equal to or less than 200 kg (light quadricycles)	N/A
3.2.3.4.1	The combined mass in column (d) is equal to or less than 1000 kg (quadricycles other than light used for transport of goods)	N/A
3.2.3.4.2	The combined mass in column (d) is equal to or less than 200 kg (quadricycles other than light used for transport of persons)	N/A

VERIFICATION OF DIMENSIONS

DIMENSIONS (mm)	Length	Width	Height
Declared	1850	710	1100
Measured	1850	710	1100



**TEST REPORT: MASSES AND
DIMENSIONS OF TWO OR THREE
WHEELED MOTOR VEHICLES**
Directive 93/93 as amended by
Directive 2004/86/EC
Regulation NA

3.1.1.1	Length equal to or less than 4.00 m	Y
3.1.1.2	Width equal to or less than 1.00 m (two-wheel moped)	Y
3.1.1.2	2.00 m (other vehicles)	N/A
3.1.1.3	Height equal to or less than 2.50 m	Y





Vehicle Certification Agency
1 The Eastgate Office Centre
Eastgate Road
Bristol
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Telephone: +44 (0) 117 951 5151
Fax: +44 (0) 117 952 4103
Email: enquiries@vca.gov.uk
www.dft.gov.uk/vca/

TEST REPORT: FITTING OF TYRES TO TWO OR THREE WHEEL MOTOR VEHICLES

03-026

TEST DETAILS

Subject	FITTING OF TYRES TO TWO OR THREE WHEEL MOTOR VEHICLES
EC Directive	97/24/EC CHAPTER 1
ECE Regulation	N/A
Location of Test	Nanchang Motorcycle Quality Inspection and Testing Institute
Date of Test	24 November 2016
VCA Representative	Du Song
Manufacturer's Representative	Mr. Xu
Reason for Test	New approval

MANUFACTURER DETAILS

Manufacturer's Name	Jiangsu Xinri E-Vehicle Co.,Ltd.
Manufacturer's Address	No.501, Xishan Road, Anzhen Town, Xishan District, Wuxi City, Jiangsu, P.R.China
Model Type & description	HAWK
Category	L1e

CONCLUSION

The above mentioned vehicle was tested in accordance with EC Directive 97/24/EC CHAPTER 1 and was found to comply in all respects

Signature:

Name: Du Song
Position: Test Engineer
Date: 12 December 2016

LIST OF ANNEXES

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TR//M/C/EWVTA ITEM 29/00

Revision 1
11 December 2012

Report/Job
Number:CWS378045
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TEST REPORT: FITTING OF TYRES TO TWO OR THREE WHEEL MOTOR VEHICLES

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TEST SPECIFICATION/WORST CASE RATIONALE: Single specification

- | | | |
|---|--|-----|
| 1 | Risk assessment completed and stored in job folder | N/A |
| 2 | Facilities and test equipments are appropriate | N/A |
| 3 | Calibration certificates checked and valid, recorded below | |

Equipment	Serial No.	Calibration data

Manufacturer's documentation complete Yes

MAXIMUM AXLE WEIGHT: FRONT: 86kg; REAR: 190 kg

MAXIMUM SPEED: 45 km/h

Details of tyres fitted to vehicle:

	Make	Size	LCI	Load kg	Speed Rating	Speed km/h	Approval No:
Front Axle	YUANXING	110/70-12	41	145	K	110	E4-75R-0008850
Rear Axle	YUANXING	120/70-12	57	230	K	110	E4-75R-0005677
Spare	N/A	N/A					

		Complies Yes/NA
Annex III	REQUIREMENTS FOR VEHICLES WITH REGARD TO THE FITTING OF THEIR TYRES:	Yes

1.1 General

TR/M/C//EWVTA ITEM 29/00

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11 December 2012

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TEST REPORT: FITTING OF TYRES TO TWO OR THREE WHEEL MOTOR VEHICLES

Subject to the provisions of section 2 every tyre fitted to a vehicle, including any spare, must bear the EC component type-approval mark (97/24) or the type-approval mark indicating compliance with ECE Regulation Nos: 30, 54, 64 or 75 as referred to in Article 4 of this Directive

Yes

- | | | |
|--|---|---|
| 1.2 | Tyre fitment | |
| 1.2.1 | All of the tyres fitted to a vehicle must have the same speed categories symbol (Annex II 1.1.5) | |
| Note: it is acceptable to fit different speed categories to the same vehicle if speed category cover the maximum declared speed | | |
| 1.2.2 | All of the tyres fitted to one axle must be of the same type (see Annex II, section 1.1) | |
| 1.2.3 | The space in which the wheel revolves must be such as to allow unrestricted movement when using the maximum permissible size of tyres within the suspension and steering constraints provided by the vehicle manufacturer | |

Yes

Yes

- | | | |
|-----|---|---|
| 2 | Special Cases: | |
| 2.1 | Motorcycles with side car, three wheel mopeds, tricycles and quadricycles may be fitted with tyres approved to 92/23/EC | |
| 2.2 | Mopeds, motorcycles type may be fitted | |
| 2.3 | Types for special conditions fitted?
Give details: | |
| 2.4 | Types for special conditions fitted to low performance mopeds (Annex 1 92/61/EC)
Give details: | |

N/A

N/A

N/A

Remarks (if applicable): None



TEST REPORT: FITTING OF TYRES TO TWO OR
THREE WHEEL MOTOR VEHICLES

TR/M/C//EWVTA ITEM 29/00

Revision 1
11 December 2012

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Vehicle Certification Agency
1 The Eastgate Office Centre
Eastgate Road
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Telephone: +44 (0) 117 951 5151
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www.dft.gov.uk/vca/

TEST REPORT: Braking of two or three wheel motor vehicles

Directive 93/14/EEC as amended by Directive 2006/27/EC
~~UNECE Regulation 78.02~~

REPORT/JOB NUMBER: CWS378045

TEST DETAILS

Location of Test	Nanchang Motorcycle Quality Inspection and Testing Institute
Date of Test	25 November 2016
VCA Representative(s)	Du Song
Manufacturer's Representative(s)	Mr. Xu
Reason for Test	New approval

MANUFACTURER DETAILS

Manufacturer's Name	Jiangsu Xinri E-Vehicle Co.,Ltd.
Manufacturer's Address	No.501, Xishan Road, Anzhen Town, Xishan District, Wuxi City, Jiangsu, P.R.China
Model Type & description	HAWK
Category	L1e

CONCLUSION

The above mentioned vehicle was tested in accordance with EC Directive 93/14/EEC as amended by 2006/27/EC and ~~UNECE Regulation 78.02~~ and was found to comply in all respects

Signature:
Name: Du Song,
Position: Type Approval Engineer
Date: 12 December 2016

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TEST REPORT: Braking of two or three wheel motor vehicles

EC Directive 93/14/EEC
UNECE Regulation 78.02

TEST SPECIFICATION AND WORST CASE RATIONALE

Four variants ,Variant1 as tested vehicle to cover variant2,3,4

Tests required (if more than one is applicable)

- Unladen test
- Laden test
-
-
-

COMPONENT SPECIFICATION (as specified in agreed worse case rationale)

Yes

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 worse case rationale

Yes

FACILITY AND EQUIPMENT CHECKS

- | | | | | |
|---|---|----------------------------------|--|--|
| 1 | Generic Risk assessment followed | <i>Insert RA identifier here</i> | | N/A |
| | OR | | | |
| | Specific Risk assessment completed and stored in electronic job folder | | | |
| 2 | Facilities and test equipment are appropriate | | | |
| | Brief description of test equipment: See the table below | | | Yes |
| 3 | Calibration certificates checked and valid, recorded in the following table | | | |
| | | | | Yes |

Equipment	Serial No.	Calibration data
Vehicle Performance Test System	VBOX II	Valid to 2017-3-23





TEST REPORT: Braking of two or three wheel motor vehicles

EC Directive 93/14/EEC
UNECE Regulation 78.02

TEST SPECIFICATION:

ENGINE:
GEARBOX:
CATEGORY

<u>VEHICLE :</u>	
Electric Motor	
N/A	
L1e	

- SIZE/MAKE/TYPE
- PRESSURE (bar)
- ROLLING RADIUS (mm)
- TREAD DEPTH (mm)

<u>FRONT AXLE TYRES:</u>	
110/70-12/YUANXING	
225kPa	
220.7,	
New tyre	

- SIZE/MAKE/TYPE
- PRESSURE (bar)
- ROLLING RADIUS (mm)
- TREAD DEPTH (mm)

<u>REAR AXLE TYRES:</u>	
1320/70-12/YUANXING	
225 kPa	
227.4mm	
New tyre	

- FRONT AXLE
(Disc/drum & dia, number/axle, piston sizes, master cyl dia, lever ratios, hand or foot)
- FRONT BRAKE MATERIAL
 - REAR AXLE
(Disc/drum & dia, number/axle, piston sizes, master cyl dia, lever ratios, hand or foot)
- REAR BRAKE MATERIAL
 - PARK BRAKE
(Hand/foot, axle, brake type, dia, lever ratios)
FRONT/REAR
INDEPENDENT OR
SPLIT SYSTEM
- ANY BRAKE DISTRIBUTION
VALVE?
- ABS?

<u>BRAKE SYSTEM:</u>	
Front disc brake dia:220mm, 1/axle, m, Master cyl dia:9.5mm, Level ratio:145:25, Hand brake	
Cu,Casio3	rear disc brake dia:220mm,1/axle, hand brake more information , refer to information documentation
Not applicable	
Independent	
Not applicable	



TEST REPORT: Braking of two or three wheel motor vehicles

EC Directive 93/14/EEC
UNECE Regulation 78.02

TEST REQUIREMENTS

		Complies Yes/NA
GENERAL CHECKS (STATICS)		
	Vehicle is as specified in documentation	Yes
2	Systems correctly mounted, made of suitable materials and fitted with locking devices where necessary	Yes
3.1.1.2	Brake linings asbestos free (Declared on drawings or confirmed by material manufacturer)	Yes
5.1.1.3		
2.2.1	Two independent braking devices with independent controls(L1e, L2e, L3e, L4e, L6e category) OR	Yes
2.2.3.2	a service braking device which operates on all the wheels and a secondary braking device (L2e, L6e, L7e) Brief details: (i.e. foot operated service brake acting on all wheels – see spec on page 2)	N/A
2.2.2	Brake acting on sidecar wheel (L4e) if required	N/A
2.2.4.1	Foot controlled service brake acting on all wheels, and a secondary braking device (L5e,L6e,L7e) Brief details (i.e. foot operated service brake acting on all wheels – see spec on page 2)	N/A
2.1.2.1	Front and rear braking possible with both hands on the steering control. Note: front brake by hand, rear brake by foot	Yes
2.2.2	Parking brake device (L2e, L5e, L6e, L7e) acting on wheels of at least one axle and with: independent control of service brake control (L5e, L6e, L7e) or independent of braking device acting on other axle(s) (L2e,L6e)	N/A
2.1.2.3	Parking braking possible from normal driving position	N/A
2.1.2.3	Parking brake held on by PURELY mechanical device (L2e, L5e, L6e, L7e) {no hydraulic element allowed}	N/A
2.2.5	The braking devices must act on braking surfaces attached to	Yes



TEST REPORT: Braking of two or three wheel motor vehicles

EC Directive 93/14/EEC
UNECE Regulation 78.02

wheels	
2.2.5	Parts amply dimensioned and readily accessible
2.2.7.1	Means of adjustment accessible and lever ratios appropriate for reserve travel. (Apply the maximum allowed lever force – there must be more travel available)
2.2.7	Brakes operate freely
2.1.2.1	Brakes graduable
2.2.7.3	Brake components do not contact anything other than intended parts

LINE PRESSURE RELATIVE TO CONTROL EFFORT -Not applicable

(if hydraulic pressure is measured for dynamic testing, pressure valves are fitted or brake boosted systems)

Control Effort (daN)										
Front line pressure/cable force* bar/daN										

LINE PRESSURE RELATIVE TO CONTROL EFFORT -Not applicable

(if hydraulic pressure is measured for dynamic testing, pressure valves are fitted or brake boosted systems)

Control Effort (daN)										
Rear line pressure/cable force* bar/daN										



TEST REPORT: Braking of two or three wheel motor vehicles

EC Directive 93/14/EEC
UNECE Regulation 78.02

DYNAMIC TESTING

Mass (kg)

Load Condition	Front Axle(s)	Rear Axle(s)	GVW
Laden ⁺⁺	86	190	276
Unladen*	76	125	201

* Includes mass of rider, and test equipment, maybe higher than running order with rider weight due to equipment weight.

**** If unladen test mass is close to laden GVW testing may only be needed in one condition.
The laden requirements must be met.**

UNLADEN TESTS

Brake system and Load Condition		Nom Spee d km/h	Recd Spee d km/h	Recd Dist m	Distance corrected for speed m	Recd MFDD m/sec ²	Recd line pressure or control effort bar/daN
Front (Or Service)	U/L	60/40	41.03	16.45	15.63	5.49	16.45
Rear (Or Secondary)	U/L	60/40	40.52	18.19	17.73	4.97	18.19
LIMITS FRONT	U/L	60/40			28.62	2.5	20
LIMITS REAR	U/L	60/40			28.62	2.5	20
Connected stops (in gear)	30% Vmax						F R
Both Brakes Together	55% Vmax						F R
(Record max performance and stability, no distance or decal limits).	80% Vmax up to 160						F R

1.2.1.1 Record Distance and MFDD, both limits must be met.



TEST REPORT: Braking of two or three wheel motor vehicles

EC Directive 93/14/EEC
UNECE Regulation 78.02

Comment stability during connect stops: No test needed

NB: Wet test needs to be conducted Laden.

SPECIAL TYPE 'O' WET TEST - L1e, L2e, L3e AND L4e Exposed disc brakes							
	Brake system and Load condition		Nom Spee d km/h	Recd Speed km/h		Deceleratio n m/s ²	Recd line pressur e or control effort bar/da N
D R Y	Front	U/L	40	40.11	MFDD 0.5 to 1.0 sec window	2.51 3.10	10
	Rear	U/L	40	41.00	MFDD 0.5 to 1.0 sec window	2.52 3.04	11.0
W E T	Front	U/L	40	41.12	MFDD 0.5 to 1.0 sec window	2.45 1.98	9.6
	Rear	U/L	40	40.56	MFDD 0.5 to 1.0 sec window	1.90 2.11	10.7

Mean deceleration wet test at least 60% of dry reference (in 0.5 – 1.0 second window)

Front:98.1%

Yes

Rear:106.6%

Yes

Deceleration during wet test never more than 120% of dry reference

Front:97.6%

Yes

Rear:73.4%

N/A



TEST REPORT: Braking of two or three wheel motor vehicles

EC Directive 93/14/EEC
UNECE Regulation 78.02

LADEN TESTS

PARKING BRAKE GRADIENT TEST-Not applicable

Vehicle GVW on 18 % hill

Gradient used %	Facing	Control Force	Limit		Complies
	UP				
	DOWN				

Brake system and Load Condition		Nom Speed km/h	Recd Speed km/h	Recd Dist m	Distance corrected for speed m	Recd MFDD m/sec ²	Recd line pressure or control effort bar/daN
Front <i>(Or Service)</i>	L	60/40	40.30	19.58	19.29	3.75	14.51
Rear <i>(Or Secondary)</i>	L	60/40	39.79	18.51	18.71	3.65	13.89
LIMITS FRONT	L	60/40			21.78	3.4	20
LIMITS REAR	L	60/40			26.86	2.7	20

1.2.1.1 Record Distance and MFDD, both limits must be met.

TYPE I TEST: COLD REFERENCE TEST (LADEN) L3 L4, L5, L7-Not applicable

(Type O result can be used, or a lower effort cold reference to avoid wheel lock on hot stop if performance improves)

Brake system and Load condition		Nom Speed km/h	Recd Speed km/h	Recd Dist m	Distance corrected for speed m	MFDD m/sec ²	Recd line pressure or control effort bar/daN
Front	L						
Rear							



TEST REPORT: Braking of two or three wheel motor vehicles

EC Directive 93/14/EEC
UNECE Regulation 78.02

TYPE I FADE TEST-Not applicable

FRONT BRAKE

Speed V km/h	Interval Distance 1000 m	
Number of applications: 10	Control effort for repeated braking: Front daN (Force to give MFDD of 3.0)	N/A
Time elapsed between last fade application and hot Type 'O' test	secs	N/A

REAR BRAKE

Speed V km/h	Interval Distance 1000 m	
Number of applications: 10	Control effort for repeated braking: Rear daN (Force to give MFDD of 3.0)	N/A
Time elapsed between last fade application and hot Type 'O' test	secs	N/A

		Nom Speed km/h	Recd Speed km/h	Recd Dist m	Distance corrected for speed m	Recd AV Decel m/sec ²	Recd line pressure or control effort bar/daN
HOT Type 'O'	F	60					
	R	60					
Limit: 60% of cold reference	F	60					
	R	60					



TEST REPORT: Braking of two or three wheel motor vehicles

EC Directive 93/14/EEC
UNECE Regulation 78.02

Conditions during dynamic testing:

Wind speed 1.3 km/h Ambient temperature 9 °C

Yes

Brakes were not binding or rubbing at ambient temperature

Yes

Subjective assessment of the handling and stability during braking, and the progressive action of the controls etc: No binding, vehicle keeps normal driven status,

Yes

Remarks (if applicable): None





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1 The Eastgate Office Centre,
Eastgate Road,
Bristol,
BS5 6XX,
United Kingdom.
Telephone: +44 (0) 117 951 5151
Fax: +44 (0) 117 952 4103
Email: enquiries@vca.gov.uk
www.dft.gov.uk/vca/

TEST REPORT: LIGHTING INSTALLATION

EC Directive 2009/67/EC

ECE Regulation 53 and 53.01

Two or Three Wheeled Motor Vehicles and Light Quadricycles

REPORT/JOB NUMBER: CWS378045

TEST DETAILS

Subject	LIGHTING INSTALLATION
Location of Test	Nanchang Motorcycle Quality Inspection and Testing Institute
Date of Test	25 November 2016
VCA Representative	Du Song
Manufacturer's Representative	Mr. Xu
Reason for Test	New approval

MANUFACTURER DETAILS

Manufacturer's Name	Jiangsu Xinri E-Vehicle Co.,Ltd.
Manufacturer's Address	No.501, Xishan Road, Anzhen Town, Xishan District, Wuxi City, Jiangsu, P.R.China
Model Type & description	HAWK
Category	L1e

CONCLUSION

The above mentioned vehicle was tested in accordance with the above listed legislation and was found to comply in all respects

Signature:

Name: Du Song
Position: Type Approval Engineer
Date: 12 December 2016

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TEST REPORT: LIGHTING INSTALLATION

**EC Directive 2009/67/EC
ECE Regulation 53 and 53.01**

TEST SPECIFICATION AND WORST CASE RATIONALE

Single specifications

TEST VEHICLE SPECIFICATION

VIN OR CHASSIS NUMBER	Variant 1:☆LXRBE0GW1H0901369☆ Variant 2:☆LXRBE0GX4H0900001☆ Variant 3:☆LXRBE0GY3H0900001☆ Variant 4:☆LXRBE0GZ2H0900001☆
MOTORCYCLE DESCRIPTION	Two -wheel moped

MANUFACTURERS DOCUMENTATION

Manufacturers documentation is complete and reflects the agreed specification for the vehicle tested and covers all variants and versions agreed in the worse case rationale

Yes

FACILITY AND EQUIPMENT CHECKS

- 1 Generic Risk assessment followed
OR
Specific Risk assessment completed and stored in electronic job folder

 - 2 Facilities and test equipment are appropriate
Brief description of test equipment:
See the table below

 - 3 Calibration certificates checked and valid, recorded below

Equipment	Serial No.	Calibration data
Pocket ruler	8202	Valid to 31 December 2017

TR/M/C/EWVTA ITEM 32/00

Revision 1
08 December 2012

Report/Job
Number:CWS378045
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TEST REPORT: LIGHTING INSTALLATION

EC Directive 2009/67/EC
ECE Regulation 53 and 53.01
Two or Three Wheeled Motor Vehicles and
Light Quadricycles

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TEST REQUIREMENTS

Complies
Yes/NA

GENERAL SPECIFICATIONS

	Vehicle and lamps are as specified in documentation	Yes
EC Annex IB 1. ECE 5.1	All lamps and reflectors securely mounted	Yes
	Not likely to become misaligned	Yes
EC Annex IB 2. ECE 5.2	Headlamps and front fog lamps can be easily adjusted	Yes
EC Annex IB 3. ECE 5.3	All lamps and reflectors (except head, front fog and reversing lamps) have reference axis $\pm 3^\circ$ parallel to the ground and to the longitudinal plane	Yes
	Any specific mounting recommendations have been complied with	Yes
	All side reflectors have their reference axis $\pm 3^\circ$ perpendicular to the longitudinal median plane	Yes
EC Annex IB 5.1 & 5.2. ECE 5.5.2	All pairs of lamps are symmetrically mounted	Yes
EC Annex IB 5.3 & 5.4 ECE 5.5.2	All pairs of lamps appear to be the same colour and brightness	Yes



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<i>EC Annex IB 6. ECE 5.6</i>	Lamps that have different functions and have been grouped or independent, combined or reciprocally incorporated in one device, apply with the requirements applicable to them	Yes
<i>EC Annex IB 8 ECE 5.8.</i>	No lamp (other than a direction indicator) emits a flashing light	Yes
<i>EC Annex IB 9.1 ECE 5.9.1</i>	No red light visible to the front in Zone 1 (see Appendix 1 of Annexes II to VI for dimensions)	Yes
<i>EC Annex IB 9.2 ECE 5.9.2</i>	No white light visible to the rear (except reversing light) in Zone 2 (see Appendix 1 of Annexes II to VI for dimensions)	Yes
<i>EC Annex IB 10. ECE 5.10</i>	Electrical connections are such that the front position headlamp (or dipped-beam headlamp), rear position lamp and registration plate lamp can only be switched on and off simultaneously	Yes
<i>EC Annex IB 11. ECE 5.11</i>	Electrical connections are such that the main-beam headlamp, the dipped-beam headlamp and tannot be swihe fog lamp ctch on until the lamps referred to above have been switched on	Yes

TELLTALES

*EC Annex
IB 12.1
ECE 5.12*

All telltales are clearly visible to the driver in the normal driving position

Yes



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EC

Annexes II
to VI
ECE 6.

SPECIFICATIONS OF INDIVIDUAL LAMPS

ECE 6.1

MAIN (DRIVING) BEAM HEADLAMPS

Regulation: Mandatory

Directive:

Mandatory for:

2 wheel motorcycles, motorcycles with side-car,
tricycles

Optional for:

2 wheel mopeds, 3 wheel mopeds, quadricycles

Not Allowed on:

None

Approval Number:

E11 113R-006929

Yes

Number Fitted:

1 or 2, (2 required for tricycles or 3 wheeled
mopeds of width exceeding 1300mm)

1

Colour:

Regulation lamp approved to: e.g. Reg 113

Yes

Width:

White

Yes

Reference centre symmetrical to median
longitudinal plane of vehicle

Height:

Distance between edge of illuminating surface
of lamp and an independent passing lamp must
not exceed 200mm

Yes

Edge of illuminating surface must be 500mm to
1300mm from ground

Yes

Orientation:

At front with no reflections to cause discomfort
to driver

Yes

Visibility:

HIAS may be installed (REG 53.01)

N/A

5° Outwards from perimeter of illuminating
surface on headlamp lens

Yes

Alignment:

Towards the front, pivots with steering angle

Yes

Electrical

Main beam headlamps must light and
extinguish simultaneously

Yes

Connections:

"Circuit-Closed" Blue (non-flashing)

Yes

Tell-tale (Mandatory):

"HIAS Failure" Amber (flashing) (REG 53.01)

N/A

Installation Details:

May be grouped together with the dipped-beam
headlamp and the other front lamps

N/A



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Reg 53.01 Requirements:

May not be combined with any other lamp	N/A
May be reciprocally incorporated with the dipped-beam headlamp, the front position lamp and the front fog lamp	Yes
Aggregate maximum intensity of head lamps shall not exceed 430,000 cd	N/A
In event of HIAS failure, it shall be possible to deactivate HIAS, reposition driving beam	N/A
Manufacturer provides detailed procedure for resetting HIAS	N/A

ECE 6.2 DIPPED (PASSING) BEAM HEADLAMPS

Regulation: Mandatory

Directive:

Mandatory for: All Motorcycles

Optional for: None

Not Allowed on: None

Approval Number:

E11 113R-006929

Yes

Number Fitted:

1 or 2, (2 required for tricycles or 3 wheeled

1

mopeds of width exceeding 1300mm)

Regulation lamp approved to: e.g. Reg 113

Colour:

White

Yes

Width:

Reference centre symmetrical to median longitudinal plane of vehicle

Yes

Distance between illuminating surfaces must not exceed 200mm for mopeds with 2 wheels and motorcycles with and without side-car

Yes

Distance between illuminating surfaces must not exceed 400mm for mopeds with 3 wheels, quadricycles and tricycles

N/A

Height:

≤ 1200 and ≥ 500 mm

Yes

Orientation:

At front with no reflections to cause discomfort to driver

Yes

EC Annex
IA 10.

Visibility:

15°

Yes

10°

Yes

10° (or 45° in case of 1 lamp)

Yes

45°

Yes

Towards the front, turns with steering angle

- α Upwards:

For Reg 53:

N/A

- α Downwards:

Vertical inclination -0.5 and -2.5%

- β Inwards:

If > 2000 lumen, angle tested at:

- β Outwards:

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Electrical Connections: HIAS (Reg 53.01)	A) 75kg +- 1kg rider B) Fully laden	
	Main beam to go off simultaneously when dipped beam selected	Yes
	The dipped beams may remain switched on at the same time as the main beam	Yes
	HIAS may be installed (Reg 53.01)	N/A
	Shall not adjust the horizontal angle by more than the vehicles bank angle	N/A
	Tested at max angle	N/A
	Tested at half max angle	N/A
	In event of HIAS failure, it shall be possible to deactivate HIAS, reposition driving beam	N/A
	Manufacturer provides detailed procedure for resetting HIAS	N/A
	"Closed Circuit" Green, non-flashing, optional "HIAS Failure" Amber, flashing, mandatory	N/A
Tell-tale: Installation Details:	May only be grouped with main-beam lamp and front position lamp	N/A
	May not be combined with any other lamp	Yes
	May be reciprocally incorporated with the main-beam headlamp and the front position lamp	Yes
	Passing beam light up when key ignition on	Yes

ECE 6.3 DIRECTION INDICATOR LAMPS

Regulation: Mandatory

Directive:

Mandatory for: 3 wheel mopeds with closed bodywork, 2 wheel motorcycles, motorcycles with side-car, tricycles

Optional for: 2 wheel mopeds, 3 wheel mopeds without closed bodywork

Not Allowed on: None

Approval Number:

Front: E11 50R-007648	
Rear: E11 50R-007649	

Yes

Number Fitted:

2 per side

Yes

Colour:

Amber

EC Annex
II
6.3.3.1.1.3

Width:

Minimum distance between illuminating surfaces of:
--

240mm front, 180mm rear for Reg 53

N/A

240mm at front and 180mm at rear for two wheel mopeds and motorcycles;
--

Yes

500mm for three wheel mopeds, Quadricycles
--

Yes



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	and tricycles; or 600mm for motorcycles with side-car.	N/A
Height:	Distance of XXmm away from dipped-beam lamps to compensate for indicator intensity of XXX cd. See relevant section in legislation. ≤ 1200 and ≥ 350 mm for Reg 53 ≤ 1200 and ≥ 350 mm for two wheel mopeds and Motorcycles ≤ 1500 and ≥ 350 mm for three wheel mopeds, quadricycles and tricycles	N/A Yes N/A
Length:	Distance towards the front between the transverse plane corresponding to the extreme longitudinal rearmost extremity of the vehicle and the centre of reference of the rear indicators must not exceed 300 mm	Yes
Visibility:		
- Horizontal:	See Appendix 2 in relevant annex for directive 20° inward and 80° outwards for Reg 53	N/A
- Vertical:	15° above and below horizontal (or 5° if lamp is less than 750mm from ground)	Yes
Alignment:	Front direction indicator may move in line with steering angle	Yes
Electrical Connections:	Switched on/off independently of other lamps All direction indicator lamps on one side of a vehicle must be switched on and off by means of one control The direction indicator lamps on the same side of the vehicle must flash at the same frequency and in phase	Yes Yes
Tell-tale:	"Operating" Green flashing tell-tale and/or audible warning Mandatory for Reg 53 and Tricycles Directive Optional for remaining vehicles	Yes
	Change of frequency/sound, or stop flashing, if lamp(s) malfunction	Yes
Other requirements:	Indicator flashing frequency 90±30 cycles /min for engine speeds 50-100% of max Indicator flashing frequency 90+30/-45 cycles/min for engine speeds between idle and 50% of max Actuation of the light-signalling device control is followed by illumination within 1 second and extinction of the first lamp within 1.5 seconds Direction indicator lamps may flash on the same side of the vehicle either simultaneously	Yes Yes Yes Yes



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Installation Details:

or alternately	
May be grouped with any other lamp	N/A
May not be combined with any other lamp	Yes
May not be reciprocally incorporated with any other lamp	Yes

ECE 6.4

STOP LAMPS

Regulation: Mandatory

Directive:

Mandatory for: All Motorcycles
Optional for: None
Not Allowed on: None

Approval Number:

E11 50R-007649

Yes

Number Fitted:

1 or 2, (2 required for 3 wheeled mopeds or tricycles of width exceeding 1300mm) or 3 for motorcycles with side-car, with one on side-car

1

Colour:

Red

Yes

Width:

If 2 rear wheels, 600mm between two lamps, or 400mm if vehicle width less than 1300mm

Yes

Height:

≤ 1500 and ≥ 250 mm

Yes

Orientation:

At rear of vehicle

Yes

Visibility:

- Horizontal:

45° to the left and right
10° inwards if pair

Yes

- Vertical:

15° above and below horizontal
(or 5° if lamp is less than 750mm from ground)

Yes

Alignment:

Towards rear of vehicle

Yes

Electrical

Connections: Must light up when service brake applied (need not operate when ignition is off)

Yes

Tell-tale(Prohibited):

“Circuit-closed” tell-tale not used

Yes

Installation Details:

May be grouped with rear lamps only

N/A

May not be combined with any other lamp

Yes

May be reciprocally incorporated with the rear position lamp

N/A

ECE 6.5

REAR REGISTRATION PLATE LAMP(S)

Regulation: Mandatory

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Directive:

Mandatory for:

2 wheel motorcycles, motorcycles with side-car,
tricycles

Optional for:

Not Allowed on:

2 wheel mopeds, 3 wheel mopeds, quadricycles

None

Approval Number:

E11 50R-007649

Yes

Number Fitted:

1 (may consist of several optical elements)

Yes

Colour:

White

Yes

Width:

Such as to illuminate rear no. plate space

Yes

Separation:

Such as to illuminate rear no. plate space

Yes

Height:

Such as to illuminate rear no. plate space

Yes

Orientation:

Such as to illuminate rear no. plate space

Yes

Visibility:

Such as to illuminate rear no. plate space

Yes

- Upwards:

Such as to illuminate rear no. plate space

Yes

- Downwards:

Such as to illuminate rear no. plate space

Yes

- Inwards:

Such as to illuminate rear no. plate space

Yes

- Outwards:

Such as to illuminate rear no. plate space

Yes

Electrical

No individual specifications

Yes

Connections:

Where fitted, to be as position lamps

N/A

Tell-tale (Optional):

May be grouped with one or more rear lamps

N/A

Installation Details:

May be combined with the rear position lamp

Yes

May not be reciprocally incorporated with any other lamp

Yes

ECE 6.6 FRONT POSITION (SIDE) LAMPS

Regulation: Mandatory

Directive:

Mandatory for:

3 wheel mopeds, quadricycles, 2 wheel
motorcycles, motorcycles with side-car, tricycles

Optional for:

2 wheel mopeds

Not Allowed on:

None

Approval Number:

E11 50R-006929

Yes

Number Fitted:

1 or 2, (2 required for 3 wheeled mopeds or
tricycles of width exceeding 1300mm) or 2 or 3
for motorcycle with side-car, with 1 on side car

1

Colour:

White

Yes

Width:

Reference centre symmetrical to median
longitudinal plane of vehicle

Yes

For Directive Only: (Not 2 Wheeled Cycles)

If two lamps, outer edge of illuminating surface
must be not more than 400mm from outermost

N/A



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	edge of vehicle, and, the internal edges of the illuminating surface must be at least 500mm apart (or 400mm for vehicle widths less than 1300mm)	
Height:	≤ 1200 and ≥ 350 mm	Yes
Orientation:	At front of vehicle	Yes
Visibility:		
- Horizontal:	80° to left and right if single lamp 80° outwards and 45° inwards if two lamps	Yes
- Vertical:	15° above and below the horizontal (or 5° if lamp is less than 750mm from ground)	Yes
Alignment:	Towards the front, pivots with steering angle	Yes
Electrical Connections:	No individual specifications	Yes
Tell-tale (Optional, Mandatory for Reg53):	"Circuit Closed" Green tell tale (non-flashing), not required if dashboard lighting actuates simultaneously with front position lamps	Yes
Installation Details:	May be grouped with any other front lamp May be reciprocally incorporated with any other front lamp No requirement for combining with other lamps	N/A Yes Yes

ECE 6.7	REAR POSITION (SIDE) LAMPS	
	Regulation: Mandatory	
	Directive:	
	Mandatory for:	All Motorcycles
	Optional for:	None
	Not Allowed on:	None
	Approval Number:	E11 50R-007649
	Number Fitted:	1 or 2, (2 required for 3 wheeled mopeds or tricycles of width exceeding 1300mm) or 2 or 3 for motorcycles with side-car with 1 on side-car
	Colour:	Red
	Width:	If two rear wheels, two lamps must be 600mm apart and symmetrical about median longitudinal plane of vehicle. (For vehicles less than 1300mm wide, this distance can be reduced to 400mm)
	Height:	≤ 1500 and ≥ 250 mm
	Orientation:	At rear of vehicle
	Visibility:	80° to the left and right for single lamp



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- Vertical:	80° outwards and 45° inwards for 2 lamps 15° above and below horizontal (or 5° if lamp is less than 750mm from ground)	Yes
Alignment:	Towards the rear	Yes
Electrical Connections:	No individual specification	Yes
Tell-tale (Optional):	"Circuit-Closed", Must be combined with front position lamp tell-tale	Yes
Installation Details:	May be grouped with any other rear lamp	Yes
	May be combined with the rear registration-plate lamp	Yes
	May be reciprocally incorporated with the stop lamp or non-triangular rear retro-reflector, or with both, or with the rear fog lamp	Yes

ECE 6.8	REAR RETRO-REFLECTORS, NON TRIANGULAR	
Regulation:	Mandatory	
Directive:		
Mandatory for:	All Motorcycles	
Optional for:	None	
Not Allowed on:	None	
Approval Number:	IA E9-02.1269	Yes
Number Fitted:	1 Class IA (Directive), 1 or 2 (Reg 53)	N/A
Colour:	Red	YES
Width:	The reference centre must be located within the median longitudinal plane of the vehicle.	Yes
Height:	≥ 250 mm and ≤ 900 mm	Yes
Orientation:	At the rear	Yes
Visibility:		
- Horizontal:	30° to the left and right 30° outwards 10° inwards if a pair	Yes
- Vertical:	15° above and below horizontal (may be 5° if less than 750mm from ground)	Yes
Alignment:	Towards the rear	Yes
Electrical Connections:	Not applicable	Yes
Tell-tale:	Not applicable	Yes
Other requirements:	The illuminating surface of the reflector may have parts in common with any other rear-mounted red lamp	N/A
Installation Details:	May be grouped with any other lamp The illuminating surface may have parts in	N/A N/A



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common with any other red rear lamp

ECE 6.9 HAZARD WARNING SIGNAL - SEE DIRECTION INDICATORS

Regulation: Optional

Directive:

Mandatory for: Tricycles

Optional for: 2 wheel mopeds, 3 wheel mopeds,
quadricycles, 2 wheel motorcycles, motorcycles
with side-car

Not Allowed on: None

Electrical
Connections:

The signal must be actuated by a separate
control which enables all directional indicators
simultaneously

N/A

Tell-tale (Mandatory) :

Possible to actuate when engine is off

N/A

Red flashing tell-tale (can be in conjunction with
direction indicator tell-tales);
Or,

N/A

Can be combined use of lh and rh green
direction indicator tell-tales used together but
only if they are normally lit separately when
used as direction indicators

N/A

Other Requirements:

A light flashing frequency of 90 ± 30 times per
minute.

N/A

Actuation must result in illumination of the lamp
within 1 second and initial extinction within 1.5
seconds

N/A

ECE 6.10 FRONT FOG LAMPS

N/A

Regulation: Optional

Directive:

Mandatory for: None

N/A

Optional for: 3 wheel mopeds, quadricycles, 2 wheel
motorcycles, motorcycles with side-car, tricycles

N/A

Not Allowed on: 2 wheel mopeds

N/A

N/A

Approval Number:

N /





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		A	
Number Fitted:	2 (Directive), 1 or 2 (Reg 53)	N/A	
Colour:	White or Yellow	N/A	
Width:	Reg: Reference centre symmetrical to median longitudinal plane of vehicle. Edge of illuminating surface must be not more than 250mm away from plane. Directive: ≤ 400 mm from edge of vehicle	N/A	
Height:	≥ 250 mm No higher than highest point of apparent surface for Dipped beam headlamp (other categories)	N/A	
Orientation:	At front with no reflections to cause discomfort to driver	N/A	
EC Annex IA 10.	Visibility:	N/A	
	- α: - β:	5° Upwards and Downwards 45° to the left and right for central lamp 45° outwards and 10° inwards if off-centre	N/A N/A
	Alignment:	Towards the front, pivots with steering angle	N/A
	Electrical Connections:	Can be switched on and off independently of main beam and dipped beam headlamps	N/A
	Tell-tale (Optional) :	"Circuit-Closed", Green, non-flashing	N/A
	Installation Details:	May be grouped with any front lamp May not be combined with any other front lamp May be reciprocally incorporated with a main-beam headlamp and a front position lamp	N/A N/A N/A
		N/A	
ECE 6.11	REAR FOG LAMP(S)	N/A	
	Regulation: Optional		
	Directive:	N/A	
	Mandatory for:	None	
	Optional for:	3 wheel mopeds, quadricycles, 2 wheel motorcycles, motorcycles with side-car, tricycles	
	Not Allowed on:	2 wheel mopeds	
	Approval Number:	N/ A	
	Number Fitted:	1 or 2	
	Colour:	Red	
	Width:	For Directive: If two rear wheels, two lamps must be 600mm apart and symmetrical about median longitudinal plane of vehicle. (For vehicles less than 1300mm wide, this distance can be reduced to 400mm)	



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EC Annex IA 10.	Height:	≤ 1000 and ≥ 250 mm – 3 wheel mopeds and tricycles	N/A
	≤ 900 and ≥ 250 mm - Motorcycles with and without side-car	N/A	
	≤ 900 and ≥ 250 mm – Reg 53	N/A	
Orientation:	At rear of vehicle, if single lamp it must be located on the side of the vehicle opposite to the direction of travel	N/A	
		N/A	
Visibility:		N/A	
- α :	5° Upwards and Downwards	N/A	
- β :	25° Left and Right, 10° Inwards if a pair	N/A	
Alignment:	Towards the rear	N/A	
Electrical Connections:	Rear fog lamps cannot be switched on unless main beam, dipped beam and/or front fog lamps are on	N/A	
Tell-tale (Mandatory):	"Circuit-Closed", Amber, Non flashing	N/A	
Other requirements:	Distance between fog lamp and each stop lamp > 100 mm	N/A	
Installation Details:	May be grouped with any other rear lamp	N/A	
	May not be combined with any other lamp	N/A	
	May be reciprocally incorporated with a rear position lamp	N/A	

ECE 6.12 SIDE RETRO-REFLECTORS, NON TRIANGULAR

Regulation: Mandatory

Directive:

Mandatory for: 2 wheel mopeds

Optional for: 3 wheel mopeds, quadricycles, 2 wheel motorcycles, motorcycles with side-car, tricycles

Not Allowed on: None

Approval Number: IA E9-02.1270

Number Fitted: 1 or 2 Class IA per side

Colour: Amber

Width: No individual specifications

Height: ≥ 300 mm and ≤ 900 mm

Orientation: Cannot be masked by driver or clothing

Visibility: Yes

- Horizontal: 30° to the front and rear

- Vertical: 15° above and below horizontal

(may be 5° if less than 750mm from ground)

Alignment: Reference axis perpendicular to the median

Yes

1

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes



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Electrical Connections: Tell-tale: Installation Details:	longitudinal plane of the vehicle and positioned outwards	
	May pivot with steering angle	Yes
	Not applicable	Yes
	Not applicable	Yes
	May be grouped with any other lamp	N/A

ECE 6.13	DAYTIME RUNNING LAMP ! Applies to Reg 53 and Reg 53.01 Only Regulation: Optional	
	Approval Number:	N/ A
	Number Fitted:	1 or 2 Conforming to Reg 87
ECE 6.13.4.1	Colour:	White
	Width:	Reference centre symmetrical to median longitudinal plane of vehicle and the edge of the illuminating surface lies within 250mm If 2 used, distance between separating surfaces shall not exceed 420mm, however; Separating distance not applicable if grouped, combined, reciprocally incorporated or are within the projection of the frontline silhouette of the motorcycle on an orthogonal plane perpendicular to the longitudinal median plane of vehicle
ECE 6.13.4.2	Height:	≥ 250 mm and ≤ 1500 mm
ECE 6.13.4.3	Orientation:	At the front
ECE 6.13.5	Visibility:	N/A
	- Horizontal:	20° outwards and 10° inwards
	- Vertical:	10° upwards and downwards
ECE 6.13.6	Alignment:	Towards the front, pivots with steering angle
ECE 6.13.7	Electrical Connections:	Switches on automatically at engine start Switches off when headlamps are switched on When switched on, the Passing Beam Headlamp and Front Position Lamps shall not switch on If distance between directional indicator lamp



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ECE 6.13.8	Tell-tale:	and daytime running lamp is ≤ 40mm, the daytime running lamp reduces intensity/switches off during activation of direction indicator lamp	
		If reciprocally incorporated with directional indicator, it must turn off for the entire duration of its activation period (ON and OFF cycle)	N/A
		Closed circuit optional	N/A
	Installation Details:	May be grouped with any other lamp	N/A
		May be combined with any other lamp	N/A
		May be reciprocally incorporated with any other lamp if condition above are met	N/A



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ECE Regulation 53 and 53.01

PEDAL RETRO-REFLECTORS, PEDALS FOR PROPULSION ONLY

! Applies to Directive 2009/67 Only

Mandatory for: 2 Wheel Mopeds with non retractable pedals

Optional for: None

Not Allowed on: 2 wheel motorcycles, Motorcycles with side-car, Tricycles

Approval Number:		N/A
Number Fitted:	2 per pedal	N/A
Colour:	Amber	N/A
Width:	No individual specification	N/A
Height:	No individual specification	N/A
Orientation:	No individual specification	N/A
Visibility:	Clearly visible to front and rear	N/A
Alignment:	No individual specification	N/A
Electrical	Not applicable	N/A
Connections:		
Tell-tale:	Not applicable	N/A
Other requirements:	The illuminating surface of the reflector must be recessed within its frame	N/A
Installation Details	No individual specification	N/A

REVERSING LAMP(S)

! Applies to Directive 2009/67 Only

Mandatory for: None

Optional for: 3 wheel mopeds and light quadricycles, tricycles

Not Allowed on: 2 wheel mopeds, 2 wheel motorcycles, motorcycles with side-car

Approval Number:		N/A
Number Fitted:	1 or 2	N/A
Colour:	White	N/A
Width:	No individual specification	N/A
Height:	≤ 1200 and ≥ 250 mm	N/A
Orientation:	At rear of vehicle	N/A
Visibility:		
- α :	15° upwards and 5° downwards	N/A
- β :	45° to the left and right if single lamp 45° outwards and 30° inwards if two lamps	N/A
Alignment:	Towards the rear	N/A

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Electrical Connections:	Can only light up when ignition on and reverse gear is selected	N/A
Tell-tale (Optional) :		N/A
Installation Details:	May be grouped with any other rear lamp May not be combined with any other lamp May not be reciprocally incorporated with another lamp	N/A N/A N/A

FRONT RETRO- REFLECTORS, NON-TRIANGULAR

! Applies to Directive 2009/67 Only

Mandatory for: None
Optional for: 2 Wheel Mopeds
Not Allowed on: 3 Wheel Mopeds, Light Quadricycles, 2 Wheel Motorcycles, Motorcycles with side-car, Tricycles

Approval Number:		N/A
Number Fitted:	1 Class IA	N/A
Colour:	White	N/A
Width:	Reference centre within median longitudinal plane of vehicle	N/A
Height:	≥ 400 mm and ≤ 1200 mm	N/A
Orientation:	At the front	N/A
Visibility:		N/A
- Horizontal:	30° to the left and right	N/A
- Vertical:	15° above and below horizontal (may be 5° if less than 750mm from ground)	N/A
Alignment:	Towards the front, pivots with steering angle	N/A
Electrical Connections:	Not applicable	N/A
Tell-tale:	Not applicable	N/A
Installation Details	May be grouped with any other lamp No defined requirements for combined or reciprocally incorporated lamps	N/A

Remarks (if applicable): None





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TEST REPORT: Audible warning device (installation) for two or three wheel motor vehicles

EC Directive 93/30/EEC

TEST DETAILS

Subject	Audible warning device (installation) for two or three wheel motor vehicles
EC Directive	93/30/EEC
ECE Regulation	N/A
Location of Test	Nanchang Motorcycle Quality Inspection and Testing Institute
Date of Test	25 November 2016
VCA Representative	Du Song
Manufacturer's Representative	Mr. Xu
Reason for Test	New approval

MANUFACTURER DETAILS

Manufacturer's Name	Jiangsu Xinri E-Vehicle Co.,Ltd.
Manufacturer's Address	No.501, Xishan Road, Anzhen Town, Xishan District, Wuxi City, Jiangsu, P.R.China
Model Type & description	HAWK
Category	L1e

CONCLUSION

The above mentioned vehicle was tested in accordance with EC Directive 93/30/EEC and was found to comply in all respects

Signature:

Name: Du Song
Position: Test Engineer
Date: 12 December 2016

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TEST REPORT: Audible warning devices for two or three wheel motor vehicles

TEST SPECIFICATION/WORST CASE RATIONALE:

Single specification

- | | | |
|---|--|-----|
| 1 | Risk assessment completed and stored in job folder | N/A |
| 2 | Facilities and test equipments are appropriate | N/A |
| 3 | Calibration certificates checked and valid, recorded below | |

Equipment	Serial No.	Calibration data
Sound level meter:		
Make	B&K	
Type	TES1350A	
Serial number	TES1350A	
Date of calibration certificate	Valid to 01 July 2017	
Date last checked		

Complies
Yes/NA

Manufacturer's documentation complete

Yes

Details of horns fitted:

Make & Type	Make:MOCC Type: DL700-34
Model number	DL700-34
Voltage rating	12
Number fitted	1
Approval number	E4-28R-000032

Mounting position of horn as manufacturers documents

Yes

Brief description of weather conditions:

Sunny day, Wind speed: 1.1 km/hour

Supply voltage

13Volts

Yes

Microphone located 7m ahead of the test vehicle

Yes





TEST REPORT: Audible warning devices for two or three wheel motor vehicles

Ambiant noise level 54dB(A) Yes

Test Results

Microphone height (m)	Sound Level dB(A)	
0.90	103.2	Yes
0.91	102.5	Yes
0.88	102.1	Yes

Test requirement within 0.5 to 1.5m height peak of:

75 to 112 dB(A) Mopeds

80 to 112 dB(A) Motorcycles <7 kW

93 to 112 dB(A) Motorcycles >7 kW

Remarks (if applicable):None





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TEST REPORT: Space for mounting rear registration plate of two or three wheel vehicles
Directive 2009/62/EC

REPORT/JOB NUMBER: CWS378045

TEST DETAILS

Subject	Space for mounting rear registration plate of two or three wheel vehicles
EC Directive	2009/62/EC
ECE Regulation	N/A
Location of Test	Nanchang Motorcycle Quality Inspection and Testing Institute
Date of Test	25 November 2016
VCA Representative	Du Song
Manufacturer's Representative	Mr. Xu
Reason for Test	New approval

MANUFACTURER DETAILS

Manufacturer's Name	Jiangsu Xinri E-Vehicle Co.,Ltd.
Manufacturer's Address	No.501, Xishan Road, Anzhen Town, Xishan District, Wuxi City, Jiangsu, P.R.China
Model Type & description	HAWK
Category	L1e

CONCLUSION

The above mentioned vehicle was tested in accordance with EC Directive 2009/62/EC and was found to comply in all respects

Signature:

Name: Du Song
Position: Type Approval Engineer
Date: 12 December 2016

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**TEST REPORT: Space for mounting
rear registration plate of two or three
wheel vehicles**
Directive 2009/62/EC

4

TEST SPECIFICATION AND WORST CASE RATIONALE

Single specification

Tests required (if more than one is applicable)

-
-
-
-
-

COMPONENT SPECIFICATION (as specified in agreed worse case rationale)

Yes

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 worse case rationale

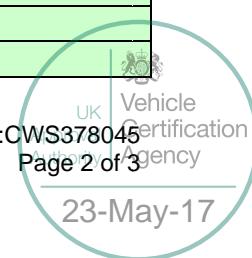
Yes

**Complies
Yes/NA**

FACILITY AND EQUIPMENT CHECKS

1	Generic Risk assessment followed	<i>Insert RA identifier here</i>	<input type="text"/>	N/A
	OR			
	Specific Risk assessment completed and stored in electronic job folder			N/A
2	Facilities and test equipment are appropriate	Brief description of test equipment:		Yes
3	Calibration certificates checked and valid, recorded in the following table			Yes

Equipment	Serial No.	Calibration data
Pocket ruler	8202	Valid to 31 December 2017





**TEST REPORT: Space for mounting
rear registration plate of two or three
wheel vehicles**
Directive 2009/62/EC

TEST REQUIREMENTS

Annex I, Item 1	Dimensions of the space for mounting rear registration plate	Yes
Item 1.1	Mopeds and light quadricycles without body:	Yes
Item 1.1.1/2	100mm wide, 175mm high	N/A
Item 1.1.3/4	OR 145mm wide, 125mm high	Yes
Item 1.2	Motorcycles, tricycles (15kW), Quads, no body. 280mm wide, 210 high	N/A
Annex I, Item 2	General location	Yes
	Located at the rear of the vehicle, within the width of the vehicle	Yes
Item 3	Inclination:	Yes
Item 3.1.1	At right angles to longitudinal median plane of the vehicle	Yes
Item 3.1.2/3	Vertical inclination between 30° facing up to 15° facing down25..... degrees UP /DOWN	Yes
	Height (Vehicle at kerb mass)	Yes
Item 4.1	Maximum 1.5m0.560.....m	Yes
Item 5.1	Minimum 0.2m OR wheel radius if less than 0.2m0.437.....m	Yes
Item 6.1	Geometric Visibility:	Yes
Figure 1	30° up from the top edge of the plate	Yes
Figure 1	5° down from the bottom edge of the plate	Yes
Figure 2	30° either side	Yes

Remarks (if applicable) : Not applicable





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TEST REPORT: RADIO INTERFERENCE (ELECTROMAGNETIC COMPATIBILITY)
Directive 97/24/EC Chapter 8

REPORT/JOB NUMBER: CWS378045

TEST DETAILS

Subject	ELECTROMAGNETIC COMPATIBILITY
EC Directive	97/24 Chapter 8
ECE Regulation	N/A
Location of Test	Nanjing SIMEC EMC LAB Jiangsu Yangzi Inspection Lab
Date of Test	06 December 2016
VCA Representative	Du Song, Panyu
Manufacturer's Representative	Mr. Xu
Reason for Test	New approval

MANUFACTURER DETAILS

Manufacturer's Name	Jiangsu Xinri E-Vehicle Co.,Ltd.
Manufacturer's Address	No.501, Xishan Road, Anzhen Town, Xishan District, Wuxi City, Jiangsu, P.R.China
Model Type & description	HAWK
Category	L1e

CONCLUSION

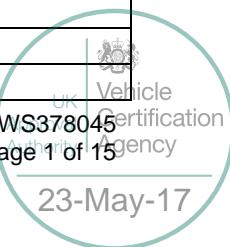
The above mentioned vehicle was tested in accordance with EC Directive 97/24 chapter 8 and was found to comply in all respects

Signature:

Name: Du Song
Position: Test Engineer
Date: 14 December 2016

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**TEST REPORT: RADIO
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COMPATIBILITY)**
Directive 97/24/EC Chapter 8

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TEST SPECIFICATION AND WORST CASE RATIONALE

Single specification

Tests required (if more than one is applicable)

- Broadband test
- Narrowband test
- Immunity test
-
-

COMPONENT SPECIFICATION (as specified in agreed worse case rationale)

Yes

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 worse case rationale

**Complies
Yes/NA**

FACILITY AND EQUIPMENT CHECKS

1	Generic Risk assessment followed	<i>Insert RA identifier here</i>	<input type="text"/>	N/A
	OR			
	Specific Risk assessment completed and stored in electronic job folder			N/A
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
EMI TEST RECEIVER	ESPI	Valid to 31





Ref:

**TEST REPORT: RADIO
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(emission test)		March 2017
Antenna (emission test)	JB6	Valid to 31 March 2017
High gain log-periodic antenna(0-1G) (Immunity test)	HL046E/100203	Valid to 01 August 2017

TEST REQUIREMENTS

**Complies
Yes/NA**

Vehicle corresponds to that agreed in worst-case meeting

Yes

EMISSIONS

Annex II & III 1.1	Measuring equipment complies with CISPR 16-1(93)	Yes
--------------------	--	------------

Type and calibration date: refer to the table above

Yes

TEST LOCATION:

Annex II & III 3.1	O.A.T.S. Is level, clear area free from electromagnetic reflecting surfaces within a circle of minimum radius 30m	N/A
--------------------	---	------------

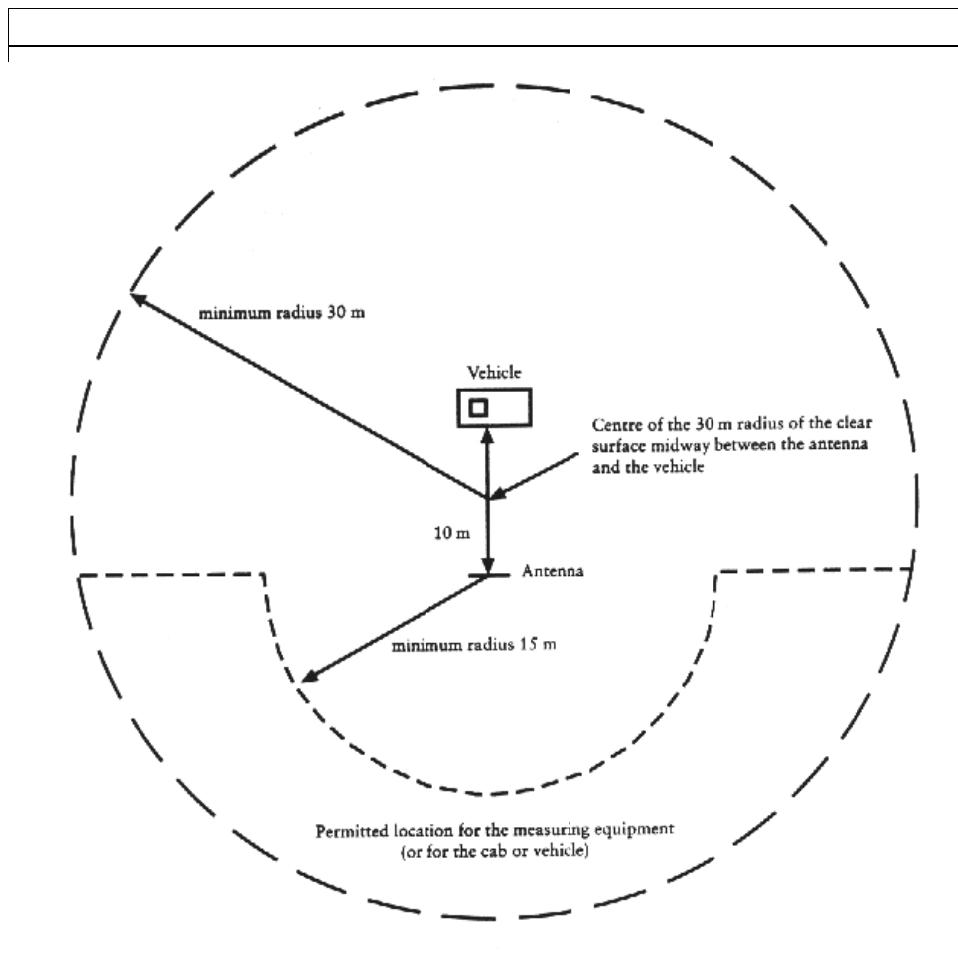
Annex II & III 3.2	Measuring equipment within test site but only in permitted region (See Figure 1)	N/A
--------------------	--	------------

Annex II & III 3.4	Ambient noise at least 10 dB below reference limits	N/A
--------------------	---	------------

Figure 1 - Vehicle test surface



Clear horizontal surface free of electromagnetic reflection



ANTENNA

Annex II & III 5.1	Types and calibration dates: refer to the table above	Yes
--------------------	---	-----

Annex II HEIGHT

& III

5.2.1.

Annex II & III 5.2.1.1.	Tests at 10 m. The antenna phase mid-point must be $3,0 \pm 0,05$ m above the vehicle plane.	Yes
-------------------------	--	-----



Re

**TEST REPORT: RADIO
INTERFERENCE
(ELECTROMAGNETIC
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Directive 97/24/EC Chapter 8

Annex II & III 5.2.1.2.	Tests at 3 m. The antenna phase mid-point must be $1,8 \pm 0,05$ m above the vehicle plane.	N/A
--	---	------------

**Annex II MEASURING DISTANCE
& III
5.2.2.**

Annex II & III 5.2.2.1.	Tests at 10 m. The horizontal distance from the antenna phase mid-point to the external surface of the vehicle must be $10,0 \pm 0,2$ m.	Yes
--	--	------------

Annex II & III 5.2.2.2.	Tests at 3 m. The horizontal distance from the antenna phase mid-point to the external surface of the vehicle must be $3,0 \pm 0,05$ m.	N/A
--	---	------------

Annex II & III 5.2.1.3.	Antenna's receiving elements no closer than 0.25m to the plane on which the vehicle rests	Yes
--	---	------------

Annex II & III 5.2.2.3.	If enclosed test facility is used, antenna's receiving elements no closer than 1.0m to any radio absorbent material or closer than 1.5m to the wall of facility	Yes
--	---	------------

Annex II & III 5.2.2.3.	No absorbent material between receiving antenna and vehicle	Yes
--	---	------------

Annex II & III 6.1	Pre-test sweep supplied to show compliance throughout frequency range 30 to 1000 MHz	Yes
-------------------------------	--	------------

	Test frequencies chosen from pre-test data	Yes
--	--	------------

Annex VI NARROWBAND TEST





Re

**TEST REPORT: RADIO
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Directive 97/24/EC Chapter 8

Initial test carried out	Yes
Ignition switched on	Yes
Electronic systems in normal operating mode	Yes
Comments:	None
Detector used and bandwidth Average detector, 120KHz	Yes





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TEST REPORT: RADIO INTERFERENCE (ELECTROMAGNETIC COMPATIBILITY)

Directive 97/24/EC Chapter 8

NARROWBAND TEST RESULTS-Not applicable

Frequency Range (MHz)	Frequency (MHz)	Left Hand Side		Right Hand Side		Correction Factor dB (μ V/m)	Maximum Value dB (μ V/m)	Limit dB (μ V/m)
		Horizontal dB (μ V/m)	Vertical dB (μ V/m)	Horizontal dB (μ V/m)	Vertical dB (μ V/m)			
30 – 45								
45 – 80								
80 - 130								
130 – 170								
170 – 225								
225 - 300								
300 - 400								
400 – 525								



Re

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525 – 700								
700 – 850								
850 - 1000								



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TEST REPORT: RADIO INTERFERENCE (ELECTROMAGNETIC COMPATIBILITY)
Directive 97/24/EC Chapter 8

Annex V BROADBAND TEST - SEE ANNEX 2 FOR TEST RESULTS

Engine is at normal operating temperature and running at correct speed
~~Single cylinder 2500rpm +/- 10%~~
~~> one cylinder 1500rpm +/- 10%~~
Electric motors 75% of maximum operating power

Yes

Speed setting mechanism not influencing electromagnetic radiation

Yes

Other sources of broadband noise at maximum current drain

Yes

List:

1. Headlamp lights up
2. Direction indicator lamps light up

Detector used and bandwidth : QP,120kHz

Yes



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TEST REPORT: RADIO INTERFERENCE (ELECTROMAGNETIC COMPATIBILITY)

Directive 97/24/EC Chapter 8

BROADBAND TEST RESULTS

Details of optional features fitted:

Frequency Suggested (MHz)	Frequency (MHz)	Left Hand Side		Right Hand Side		Correction Factor dB (μ V/m)	Maximum Value dB (μ V/m)	Limit dB (μ V/m)
		Horizontal dB (μ V/m)	Vertical dB (μ V/m)	Horizontal dB (μ V/m)	Vertical dB (μ V/m)			
45								
65								
90								
150								
180								
220								
300								
450								
600								



Re

**TEST REPORT: RADIO
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750								
900								



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TEST REPORT: RADIO INTERFERENCE (ELECTROMAGNETIC COMPATIBILITY)
Directive 97/24/EC Chapter 8

Annex IV IMMUNITY

TEST FACILITY DESIGNATION/NO: Jiangsu Yangzi

Yes

CALIBRATION: Date: Refer to the table above

Yes

Annex IV 6.1.1.	Antenna type(s) and frequency range(s):	Yes
--------------------	---	-----

Annex IV 6.1.	Antenna polarization -Vertical	Yes
------------------	--------------------------------	-----

Annex IV 5.2.1.	Antenna height - 1.5m	Yes
--------------------	-----------------------	-----

Annex IV 5.2.1.2	Antenna elements no closer than 0.25 m to plane on which vehicle rests	Yes
---------------------	--	-----

	and no closer than 1.0 m to any absorber	Yes
--	--	-----

Annex IV 5.2.2.2.	and no closer than 1.5 m to any wall	Yes
----------------------	--------------------------------------	-----

Annex IV 5.2.2.2.	No absorbent material between antenna and vehicle	Yes
----------------------	---	-----

Annex IV 5.4.	REFERENCE POINT	
------------------	-----------------	--

	- as Appendix 1 or 2 -	Yes
--	------------------------	-----

	- distance from antenna -2m	Yes
--	-----------------------------	-----

	- on vehicle centre line	Yes
--	--------------------------	-----

Annex IV	- height 1.0 ± 0.05m or 2.0 ± 0.05m -	Yes
----------	---------------------------------------	-----



Ref:

**TEST REPORT: RADIO
INTERFERENCE
(ELECTROMAGNETIC
COMPATIBILITY)**
Directive 97/24/EC Chapter 8

5.4.1.3		
	Extraneous equipment in place during calibration	Yes
Annex IV 7.1.2.	Forward power used to define test field	Yes
	OR another parameter directly related	N/A
	Calibration steps \leq 2% of previous frequency	Yes
Annex IV 7.2.1.	Field strength contour minimum 50% of nominal in minimum 80% of calibration steps	Yes

TEST ARRANGEMENTS

4.1	Vehicle	Yes
4.1.1	- unladen except test equipment	Yes
	- on appropriately loaded dynamometer	N/A
	- OR insulated axle stands	Yes
4.1.2	- headlights on dipped beam	Yes
4.1.3	- left or right direction indicator flashing	Yes
4.1.4	- all other systems which affect driver's control on as in normal operation of vehicle	Yes
4.1.5	- no connections to test area	Yes
	- reports for other systems attached	N/A
4.3	- only non-perturbing monitoring equipment	Yes
4.4	- facing antenna on centre line	Yes
	- OR other (state position)	N/A
5.3.2	Antenna elements no closer than 0.5m to outer body surface of vehicle	





Ref:

**TEST REPORT: RADIO
INTERFERENCE
(ELECTROMAGNETIC
COMPATIBILITY)**

Directive 97/24/EC Chapter 8

5.3.3	TLS ≥ 75% of length of vehicle	N/A
7.1.2	Antenna and test equipment layout to the same specification as for calibration	Yes
	Pre-test sweep supplied to show compliance throughout frequency range 20 to 1000 MHz	Yes
	Test frequencies chosen from pre-test data	Yes
	Test signal dwell time sufficient (minimum 2 seconds)	Yes
Vehicle speed:	40 km/h /gear	Yes
	Modulated test signal peak value equals unmodulated sine wave peak value whose test limits are defined in paragraph 5.4.2 of Annex I (For Modulation, carrier wave power is reduced by 5.1 dB to conserve peaks)	Yes

VEHICLE IMMUNITY TEST RESULTS –

Frequency Suggested (MHz)	Frequency (MHz)	Forward Power		Output level		Field Strength (V/m)
		Cal. (W)	Test (W)	Cal. (dBm)	Test (dBm)	
27						
45						
65						
90						
150						
180						
220						
300						
450						
600						
750						
900						





Re

**TEST REPORT: RADIO
INTERFERENCE
(ELECTROMAGNETIC
COMPATIBILITY)**
Directive 97/24/EC Chapter 8

<i>Annex I</i> 5.4.2.2.	No malfunction at 30 V/m or below	Yes
<i>Annex I</i> 5.4.2.1.	Malfunction between 25 and 30 V/m over less than 10% of 20 to 1000 MHz frequency band	Yes
Tests not performed at chamber resonant frequencies		Yes

Remarks (if applicable) :None





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TEST REPORT: FITTING OF REAR VIEW MIRRORS TO TWO OR THREE WHEEL MOTOR VEHICLES (UNBODIED)

EC Directive 97/24/EEC, Chapter 4 (Annex III) as amended by Directive 2006/27/EC

REPORT/JOB NUMBER: CWS378045

TEST DETAILS

Location of Test	Nanchang Motorcycle Quality Inspection and Testing Institute
Date of Test	14 November 2016
VCA Representative(s)	Du Song
Manufacturer's Representative(s)	Mr. Xu
Reason for Test	New approval

MANUFACTURER DETAILS

Manufacturer's Name	Jiangsu Xinri E-Vehicle Co.,Ltd.
Manufacturer's Address	No.501, Xishan Road, Anzhen Town, Xishan District, Wuxi City, Jiangsu, P.R.China
Model Type & description	HAWK
Category	L1e

CONCLUSION

The above mentioned vehicle was tested in accordance with EC Directive 97/24/EC and was found to comply in all respects

Signature:
Name: Du Song
Position: Type Approval Engineer
Date: 12 December 2016

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TEST REPORT: FITTING OF REAR VIEW MIRRORS TO TWO OR THREE WHEEL MOTOR VEHICLES (UNBODIED)

EC Directive 97/24/EEC

TEST SPECIFICATION AND WORST CASE RATIONALE

Single specification

Tests required (if more than one is applicable)

- Fitting of rear view mirror
-
-
-
-

COMPONENT SPECIFICATION (as specified in agreed worse case rationale)

Yes

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 worse case rationale

Yes

FACILITY AND EQUIPMENT CHECKS

1	Generic Risk assessment followed	<i>Insert RA identifier here</i>	 	N/A
	OR			
	Specific Risk assessment completed and stored in electronic job folder		 	N/A
2	Facilities and test equipment are appropriate Brief description of test equipment:		 	Yes
3	Calibration certificates checked and valid, recorded in the following table		 	Yes

Equipment	Serial No.	Calibration data
Pocket ruler	8202	Valid to 31 December 2017





TEST REPORT: FITTING OF REAR VIEW MIRRORS TO TWO OR THREE WHEEL MOTOR VEHICLES (UNBODIED)

EC Directive 97/24/EEC

TEST REQUIREMENTS

Complies
Yes/NA

See definition of unbodied in 2006/27/EC – explain specification below.

No side protection , no ceiling

Mirrors Fitted to the vehicle:

	Approval No:	Nominal R mm	Measured R mm	
Exterior Left	E4-81R-000388	As component Cert.	Not measured	Yes
Exterior Right	E4-81R-000388	As component Cert.	Not measured	Yes

1.1 All mirrors remain stable under normal operating conditions

1.2 Centre of reflecting surface ≥ 280 mm from median longitudinal plane of the vehicle:

Exterior Left:	365	mm	Yes
Exterior Right:	365	mm	Yes

1.3 Normal driving position gives clear view of the road to side(s) and to the rear of the vehicle:

Yes

1.6 Angle between median longitudinal plane of the vehicle and line from the centre of the ocular points and the centre of the mirror is not more than 55°

Actual angle: 40 °

Yes

1.7 Exterior mirrors do not project beyond bodywork more than necessary for field of vision

Yes

1.8 If lower edge of exterior mirror is below 2m (vehicle fully laden) mirror projects less than 0.20m beyond overall vehicle width:

Actual projection left: 0.0875 m
Actual projection right: 0.0875 m

Yes

2.3 If single exterior mirror is fitted is on the appropriate side

N/A

3 Adjustment: Adjustable rear view mirror

Yes

3.1 Mirrors are adjustable from the driving position

Yes



**TEST REPORT: FITTING OF REAR VIEW MIRRORS TO TWO OR
THREE WHEEL MOTOR VEHICLES (UNBODIED)**

EC Directive 97/24/EEC

Remarks (if applicable): None



TR/M/C/EWVTA ITEM 38/00

Revision 2
12 December 2012

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Vehicle
Certification
Authority Agency

23-May-17



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TEST REPORT: EXTERNAL PROJECTIONS, UNBODIED MOTOR VEHICLES

03-011rev1

TEST DETAILS

Subject	EXTERNAL PROJECTIONS, UNBODIED MOTOR VEHICLES
EC Directive	97/24/EC CHAPTER 3
ECE Regulation	N/A
Location of Test	Nanchang Motorcycle Quality Inspection and Testing Institute
Date of Test	25 November 2016
VCA Representative	Du Song
Manufacturer's Representative	Mr. Xu
Reason for Test	New approval

MANUFACTURER DETAILS

Manufacturer's Name	Jiangsu Xinri E-Vehicle Co.,Ltd.
Manufacturer's Address	No.501, Xishan Road, Anzhen Town, Xishan District, Wuxi City, Jiangsu, P.R.China
Model Type & description	HAWK
Category	L1e

CONCLUSION

The above mentioned vehicle was tested in accordance with EC Directive 97/24/EC CHAPTER 3 as amended by 2006/27/EC and was found to comply in all respects

Signature:

Name: Du Song
Position: Test Engineer
Date: 12 December 2016

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23-May-17



**TEST REPORT: DIRECTIVE 97/24/EC CHAPTER 3 ANNEX I
EXTERIOR PROJECTIONS UNBODIED MOTOR VEHICLES**

TEST SPECIFICATION/WORST CASE RATIONALE: Single specification

- | | | |
|---|--|-----|
| 1 | Risk assessment completed and stored in job folder | N/A |
| 2 | Facilities and test equipments are appropriate | Yes |
| 3 | Calibration certificates checked and valid, recorded below | |

Equipment	Serial No.	Calibration data
Test Device	D571-210	Valid to 29 Nov. 2016

Note: If 2, 3 or 4 wheel vehicles are considered as bodied they must meet the requirements of Annex II

device TEST SPECIFICATION/ WORST CASE RATIONALE:

Single specification

- | | |
|--|--------------------|
| Manufacturers documentation is complete | Complies
Yes/NA |
| 3.1 The external surface of the vehicle does not exhibit directed outwards any pointed or sharp parts or any projections of such shape, dimensions, direction or hardness as to be likely to increase the risk or seriousness of bodily injury to a person hit by the external surface or by brushing against it in the event of a collision | Yes |
| 4.1 Vehicle in straight line, vertical position as level floor with 50 percentile rider | Yes |
| Steering free to move | Yes |
| 5 Criteria | Yes |
| 5.2.1 GROUP 1 PARTS - GRAZING | |



TEST REPORT: DIRECTIVE 97/24/EC CHAPTER 3 ANNEX I
EXTERIOR PROJECTIONS UNBODIED MOTOR VEHICLES

Left Side:

Part	Plates Corners R>3mm edges R>0.5mm	Stems Ø>10mm edge R>2mm	Soft Rubber or Plastic <60 share
Front mudguard	Yes		
Foot plate	Yes		
Rear mudflap	Yes		

5.2.1 GROUP 1 PARTS - GRAZING

Right Side:

Part	Plates Corners R>3mm edges R>0.5mm	Stems Ø>10mm edge R>2mm	Soft Rubber or Plastic <60 share
Front tyre	Yes		
Rear wheel guard	Yes		

5.2.2 GROUP 2 PARTS: COLLISION-Not applicable



**TEST REPORT: DIRECTIVE 97/24/EC CHAPTER 3 ANNEX I
EXTERIOR PROJECTIONS UNBODIED MOTOR VEHICLES**

Left Side:

Part	Plates Edges and Corners $R>2\text{mm}$	Stems Length $<\frac{1}{2}\varnothing$ if $\varnothing <20\text{mm}$ if $\varnothing >20\text{mm}$ edges $R>2\text{mm}$	Soft Rubber or Plastic <60 share

5.2.2 GROUP 2 PARTS: COLLISION

Right Side:

Part	Plates Edges and Corners $R>2\text{mm}$	Stems Length $<\frac{1}{2}\varnothing$ if $\varnothing <20\text{mm}$ if $\varnothing >20\text{mm}$ edges $R>2\text{mm}$	Soft Rubber or Plastic <60 share

6 Specific requirements:

- 6.1 Upper edge of fairing windscreens either:
 $R \geq 2\text{mm}$
OR
Covered with edge protection of soft rubber or plastic
 <60 share

N/A

N/A



**TEST REPORT: DIRECTIVE 97/24/EC CHAPTER 3 ANNEX I
EXTERIOR PROJECTIONS UNBODIED MOTOR VEHICLES**

6.2	Outer ends of Clutch and brake levers spherical	Yes
	Radius \geq 7mm	Yes
	Outer edges \geq 2mmR	Yes
6.3	Front mudguard leading edge $R \geq 2\text{mm}$	Yes
6.4	Filler cap located in tank upper surface	Yes
	Projection $\leq 15\text{mm}$	Yes
	Connection with underlying surface smooth and spherical	Yes
	$\leq 15\text{ mm}$ projection not met, but alternative protective device provided Give details:	Yes
6.5	Ignition Key:	Yes
	Folding Type	N/A
	Flush Fitting	N/A
	Protective Cap	Yes
	Test Location: Nanchang Motorcycle Inspection Centre	Yes
	Test Date: 25 November 2016	Yes

* Delete where inapplicable

Remarks (if applicable): None





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TEST REPORT: STANDS FOR TWO WHEEL MOTOR VEHICLES

EC Directive 2002/24 as amended by Directive 2009/78/EC

REPORT/JOB NUMBER:	CWS378045
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TEST DETAILS

Location of Test	Nanchang Motorcycle Quality Inspection and Testing Institute
Date of Test	24 November 2016
VCA Representative(s)	Du Song
Manufacturer's Representative(s)	Mr. Xu
Reason for Test	New approval

MANUFACTURER DETAILS

Manufacturer's Name	Jiangsu Xinri E-Vehicle Co.,Ltd.
Manufacturer's Address	No.501, Xishan Road, Anzhen Town, Xishan District, Wuxi City, Jiangsu, P.R.China
Model Type & description	HAWK
Category	L1e

CONCLUSION

The above mentioned vehicle/component was tested in accordance with EC Directive 2009/78/EC and was found to comply in all respects

Signature:
Name: Du Song
Position: Test Engineer
Date: 12 December 2016

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**TEST REPORT: STANDS FOR TWO WHEEL
MOTOR VEHICLES**
Directive 2009/78

TEST SPECIFICATION AND WORST CASE RATIONALE

Single specification

Tests required (if more than one is applicable)

- Prop stand
- Centre stand

COMPONENT SPECIFICATION (as specified in agreed worse case rationale)

PROP STAND IDENTIFICATION

Refer to manufacturer's documentation

CENTRE STAND IDENTIFICATION

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 worse case rationale

Yes

FACILITY AND EQUIPMENT CHECKS

- | | | | | |
|----|---|----------------------------------|--|-----|
| 1 | Generic Risk assessment followed | <i>Insert RA identifier here</i> | | N/A |
| OR | | | | |
| | Specific Risk assessment completed and stored in electronic job folder | | | N/A |
| 2 | Facilities and test equipment are appropriate | | | Yes |
| | Brief description of test equipment: Purpose built tilt test rig | | | |
| 3 | Calibration certificates checked and valid, recorded in the following table | | | Yes |

Equipment	Serial No.	Calibration data
Angle Scale	-	Valid to 31 December 2016





**TEST REPORT: STANDS FOR TWO WHEEL
MOTOR VEHICLES**
Directive 2009/78

**TEST
REQUIREMENTS**

Annex I

Complies
Yes/NA

Prop stands	
3.1.1.1	Prop stand provides lateral stability on a horizontal supporting surface
3.1.1.2	or on a slope, in accordance with point 6.2.2
3.1.1.3	Prop stand must be able to swing back automatically into the retracted position:
3.1.1.3.1	when the vehicle returns to its normal (vertical) driving position; or
3.1.1.3.2	when the vehicle moves forward as a result of deliberate action by the driver;
3.1.1.4	Must be designed and constructed in such a way that they do not close automatically if the angle of lean is altered unexpectedly (for example, if the vehicle is pushed lightly by a third party or by a gust of wind arising from the passage of a vehicle):
3.1.1.4.1	once in the extended or parking position;
3.1.1.4.2	the vehicle being leaned in order to bring the outer extremity of the prop stand into contact with the ground;
3.1.1.4.3	the vehicle being left unattended in its parking position.
3.1.2	The requirements set out in point 3.1.1.3 do not apply if the vehicle is designed in such a way that it cannot be propelled by its engine when the prop stand is extended

3.2

Centre stands





**TEST REPORT: STANDS FOR TWO WHEEL
MOTOR VEHICLES**
Directive 2009/78

3.2.1 Centre stands must:

- 3.2.1.1 be able to support the vehicle with either one or both wheels in contact with the supporting surface, or without any of the wheels being in contact with that surface, in such a way as to confer stability to that vehicle:
- 3.2.1.1.1 on a horizontal supporting surface; Yes
- 3.2.1.1.2 in a leaning position; Yes
- 3.2.1.1.3 on a slope in accordance with point 6.2.2; Yes
- 3.2.1.2 be able to fold backwards automatically into the retracted or travelling position;
- 3.2.1.2.1 when the vehicle moves forward in such a way as to raise the centre stand from the supporting surface. Yes
- 3.2.2 The requirements set out in point 3.2.1.2 do not apply if the vehicle is designed in such a way that it cannot be propelled by its engine when the centre stand is extended.

Other requirements

- 4.1 Is the vehicle fitted with a tell-tale that is clearly visible to the rider when seated in the driving position and which, when the ignition is switched on, lights up and remains so until the stand is in its retracted or travelling position?

Is it fitted to: Prop/Centre/Both

N/A

N/A



**TEST REPORT: STANDS FOR TWO WHEEL
MOTOR VEHICLES**
Directive 2009/78

Results: Stability tests

Stand	Direction	Requirement		Test angle achieved
		SAE	ECE	
Side Stand	Upstream	N/A	8%	10%
Side Stand	Downstream	6°	6%	9%
Side Stand	Transverse left	8°	6%	9%
Side Stand	Transverse right	16°	6%	9%

Stand	Direction	Requirement		Test angle achieved
		SAE	ECE	
Centre Stand	Upstream	N/A	8%	10%
Centre Stand	Downstream	8°	4.6%	9%
Centre Stand	Transverse left	8°	4.6%	9%
Centre Stand	Transverse right	8°	4.6%	9%





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www.dft.gov.uk/vca/

TEST REPORT: Protective devices intended to prevent unauthorised use of two or three wheel motor vehicles

EC Directive 93/33/EEC as amended by / Directive 1999/23/EC
UN Regulation 62.00

REPORT/JOB NUMBER: CWS378045

TEST DETAILS

Subject	Protective devices intended to prevent unauthorised use of two or three wheel vehicles
EC Directive	93/33/EEC as amended by 1999/23/EC
ECE Regulation	62.00
Location of Test	Nanchang Motorcycle Quality Inspection and Testing Institute
Date of Test	24 November 2016
VCA Representative	Du Song
Manufacturer's Representative	Mr. Xu
Reason for Test	New approval

MANUFACTURER DETAILS

Manufacturer's Name	Jiangsu Xinri E-Vehicle Co.,Ltd.
Manufacturer's Address	No.501, Xishan Road, Anzhen Town, Xishan District, Wuxi City, Jiangsu, P.R.China
Model Type & description	HAWK
Category	L1e

CONCLUSION

The above mentioned vehicle was tested in accordance with EC Directive 93/33/EEC - 1999/23/EC and was found to comply in all respects

Signature:
Name: Du Song
Position: Test engineer
Date: 12 December 2016

LIST OF ANNEXES

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TEST REPORT: Protective devices intended to prevent unauthorised use of two or three wheel motor vehicles

4

Complies
Yes/NA

TEST SPECIFICATION/ WORST CASE RATIONALE:

Single specification

Manufacturer's documentation complete

Yes

GENERAL CHECKS

2.4 Type Number of device (1, 2, 3 or 4)

Yes

Type 1: solely and positively operated on the steering alone,

Type 2: positively operated on the steering in conjunction with the device which de-activates the engine,

Type 3: pre-loaded, operating on the steering in conjunction with the device which de-activates the engine,

Type 4: positively operated on the transmission

Device is as specified in documentation

Yes

3 GENERAL SPECIFICATIONS

3.2.1 Vehicle cannot be steered or driven/moved forward in a straight line with device engaged

Yes

3.2.2 Transmission prevented from functioning with device engaged (Type 4 only)

N/A

3.2.2 If activation is by control of parking device, does this act in conjunction with device for de-activating engine (Type 4 only)

N/A

3.2.3 Key extraction only possible with bolt in fully engaged or fully disengaged position

Yes

No intermediate position of key will risk bolt engagement (with or without key inserted)

Yes

3.3 Only one key used

Yes



TEST REPORT: Protective devices intended to prevent unauthorised use of two or three wheel motor vehicles

3.4	Special tools required for dismantling	Yes
	Cannot be easily rendered ineffective or destroyed	Yes
3.5	Original equipment	Yes
	Lock securely assembled in protective device:	Yes
3.6	Manufacturer certifies 1000 different combinations:	Yes
3.7	Key and lock not visibly coded:	Yes
3.8	Nearest key in combination does not turn lock cylinder with a torque of less than 0.245 mdaN: As Before	Yes
3.8.1	Design of tumblers meets requirements: As Before	Yes
3.8.2	Risk of accidental locking excluded: As Before	Yes
3.9		
3.10	Device withstood torque application of 20 mdaN in both directions (excluding Type 4)	N/A
	No damage sustained to steering mechanism likely to compromise safety (excluding Type 4)	N/A
3.11	Steering can only be locked at a minimum angle of 20° to the left and/or right of straight ahead position (excluding Type 4): ~30Degs	N/A
4	SPECIFIC REQUIREMENTS	
4.1.1	Lockable only by movement of key (handlebars being in appropriate position for bolt to engage in slot) (Types 1 and 2 only)	Yes
4.1.2	Pre-loading of bolt only possible by separate action combined with or in addition to turning of key (type 3 only)	N/A
	Removal of key not possible after bolt has been pre-loaded other than in accordance with 5.1.3 (Type 3 only)	N/A
4.2	Bolt prevented from engaging when device is in position which permits starting of engine (Types 2 and 3 only)	N/A
4.3	Impossible to prevent device functioning when set (Type 3 only)	N/A
4.4	Device subjected to wear test for 2500 cycles (Type 3 only)	N/A



TEST REPORT: Protective devices intended to prevent unauthorised use of two or three wheel motor vehicles

Device in good working order and complies with 5.7,5.8, 5.9 and 6.3
after wear test (Type 3 only)

N/A

INSTRUMENTATION

TORQUE METER	Type: 230DB, Calibration date: 25 APRIL 2016
	Type:NB-5(0-6Nm): Calibration date: 25 APRIL 2016

Remarks (if applicable): None





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TEST REPORT: PASSENGER HAND HOLDS ON TWO - WHEEL MOTOR VEHICLES

Directive 2009/79/EC

Regulation NA

REPORT/JOB NUMBER: CWS378045

TEST DETAILS

Location of Test	Nanchang Motorcycle Quality Inspection and Testing Institute
Date of Test	24 December 2016
VCA Representative(s)	Du Song
Manufacturer's Representative(s)	Mr. Xu
Reason for Test	New approval

MANUFACTURER DETAILS

Manufacturer's Name	Jiangsu Xinri E-Vehicle Co.,Ltd.
Manufacturer's Address	No.501, Xishan Road, Anzhen Town, Xishan District, Wuxi City, Jiangsu, P.R.China
Model Type & description	HAWK
Category	L1e

CONCLUSION

The above mentioned vehicle was tested in accordance with EC Directive 2009/79/EC and was found to comply in all respects

Signature:

Name: Du Song

Position: Type Approval Engineer

Date: 12 December 2016

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TEST REPORT: PASSENGER HAND HOLDS ON TWO – WHEEL MOTOR VEHICLES
Directive 2009/79/EC
Regulation NA

Single specification

Tests required (if more than one is applicable):

- Test for Strap/Handgrip
- Test for Dual Hand Grip

COMPONENT SPECIFICATION (as specified in agreed worse case rationale)

STRAP IDENTIFICATION N/A
HAND GRIP IDENTIFICATION N/A

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 worse case rationale

Yes

FACILITY AND EQUIPMENT CHECKS

1	Generic Risk assessment followed	<i>Insert RA identifier here</i>	<input type="text"/>	N/A
	OR			
	Specific Risk assessment completed and stored in electronic job folder			N/A
2	Facilities and test equipment are appropriate			Yes
	Brief description of test equipment: see below table			
3	Calibration certificates checked and valid, recorded in the following table			Yes

Equipment	Serial No.	Calibration data
Loading weight meter	SI-01009	Valid to 2017-10-18

TEST REQUIREMENTS

TR/M/C/EWVTA ITEM 43/00

Revision 4
09 October 2012

Report/Job Number: CWS378045
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TEST REPORT: PASSENGER HAND HOLDS ON TWO – WHEEL MOTOR VEHICLES
Directive 2009/79/EC
Regulation NA

		Complies Yes/NA
<i>Annex I.</i>	The strap is easily used by the passenger	N/A
<i>Item 1.1</i>	The strap withstood a vertical traction force of 2000 N (Load)	N/A
	Pressure (maximum 2 Mpa) (Force/area)	N/A
<i>Item 1.2 .</i>	Hand Grip is close to the saddle and symmetrical to the median longitudinal plane of the vehicle	
	The hand grip withstood a vertical traction force of 2000 N (Load)	Yes
	Pressure (maximum 2 Mpa).	Yes
	If two hand grips are used they must be fitted one on each side in a symmetrical manner	N/A
	The hand grip withstood a vertical traction force of 1000 N. Pressure (maximum 1 Mpa) – Near side Off side	N/A

Remarks (if applicable): None





**TEST REPORT: PASSENGER HAND
HOLDS ON TWO WHEELED MOTOR
VEHICLES**
Directive 2009/79/EC
Regulation NA

RESULTS SECTION

TR/M/C/EWVTA ITEM 43/00

Revision 4
09 October 2012

Report/Job Number:CWS378045



23-May-17



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TEST REPORT: SPEEDOMETER

Directive 2000/7/EC

Regulation 39.00 (Revision 1 Supp 9)

REPORT/JOB NUMBER: CWS378045

TEST DETAILS

Subject	SPEEDOMETER
EC Directive	2000/7/EC
ECE Regulation	R39.00
Location of Test	Shanghai Motor Vehicle Inspection Centre
Date of Test	24 November 2016
VCA Representative	Du Song
Manufacturer's Representative	Mr. Yu
Reason for Test	New approval

MANUFACTURER DETAILS

Manufacturer's Name	Jiangsu Xinri E-Vehicle Co.,Ltd.
Manufacturer's Address	No.501, Xishan Road, Anzhen Town, Xishan District, Wuxi City, Jiangsu, P.R.China
Model Type & description	HAWK
Category	L1e

CONCLUSION

The above mentioned vehicle was tested in accordance with ECE Regulation 39.00 and EC Directive 2000/7 and was found to comply in all respects

Signature:

Name: Du Song
Position: Test Engineer
Date: 12 December 2016

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TEST REPORT: **SPEEDOMETER**

Directive 2000/7/EC Regulation
39.00 (Revision 1 Supp 9)

4

TEST SPECIFICATION AND WORST CASE RATIONALE

Single specification

Tests required (if more than one is applicable)

- Speedometer
-
-
-

COMPONENT SPECIFICATION (as specified in agreed worse case rationale)

Refer to information document

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 worse case rationale

Yes

FACILITY AND EQUIPMENT CHECKS

- | | | | | |
|---|---|----------------------------------|--|--|
| 1 | Generic Risk assessment followed | <i>Insert RA identifier here</i> | <input style="background-color: #e0f2e0; width: 150px; height: 20px; border: 1px solid black; margin-right: 10px;" type="text"/> | N/A |
| | OR | | | |
| | Specific Risk assessment completed and stored in electronic job folder | | <input style="background-color: #e0f2e0; width: 150px; height: 20px; border: 1px solid black; margin-right: 10px;" type="text"/> | N/A |
| 2 | Facilities and test equipment are appropriate | | | <input style="background-color: #e0f2e0; width: 150px; height: 20px; border: 1px solid black; margin-right: 10px;" type="text"/> |
| | Brief description of test equipment: see the table below | | | Yes |
| 3 | Calibration certificates checked and valid, recorded in the following table | | | <input style="background-color: #e0f2e0; width: 150px; height: 20px; border: 1px solid black; margin-right: 10px;" type="text"/> |
| | | | | Yes |

Equipment	Serial No.	Calibration data
Vehicle Performance Test System	ML300	Valid to 2017-8-15

TR/M/C/EWVTA ITEM 45/00

Revision 2
28 February 2012

Report/Job
Number:CWS378045
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TEST REPORT: SPEEDOMETER

Directive 2000/7/EC Regulation
39.00 (Revision 1 Supp 9)

TEST REQUIREMENTS

Complies
Yes/NA

TEST SPECIFICATION:

VEHICLE :

Two-wheel moped

ENGINE:

Electric motor

GEARBOX:

N/A

AXLE RATIO:

N/A

FRONT AXLE TYRES:

- SIZE/MAKE/TYPE

110/70-
12/YUANXING/Diagonal

kPa

225

mm

245

mm

220.7

mm

New tyre

REAR AXLE TYRES:

- SIZE/MAKE/TYPE

120/70-
12/YUANXING/Diagonal

kPa

225

mm

225

mm

227.4

mm

New tyre

DETAILS OF SPEEDOMETER:

3.2.1	Make: Meiyuan	Yes
-------	---------------	-----

Type:72v	Yes
----------	-----

Description:

Speedometer value linear changes in accordance
with the motor speed

Overall speedometer drive ratio:N/A

N/A

2.1	Location: at the centre of the vehicle steering handles	Yes
-----	---	-----



TEST REPORT: SPEEDOMETER

Directive 2000/7/EC Regulation
39.00 (Revision 1 Supp 9)

(5.1)

2.1	Legible day and night:	Yes
-----	------------------------	-----

(5.1)

2.1 (5.1)	Range of speed indicated:	Yes
2.2.1 (5.1.1)	km/h Scale: 0~99km/h	Yes
2.2.3 (5.1.2)	Dual mph-km/h Scale:	N/A

Manufacturer's quoted max speed for model range:
km/h:45km/h,25km/h

2.1 (5.1). Indicated speed range enough to cover quoted maximum speed:

2.2 Analogue Scale/Digital Display:

2.2.1.1, (4.2.2)	Indicated max speed <u>does not</u> exceed 200 km/h:	Yes
------------------	--	-----

Steps for Marked Speed Indication:5km,5mph

2.2.1.1 [Requirement: Marked Speed at intervals not exceeding 20 (km/h and mph)]

2.2.1.2, (4.2.2) Indicated max speed exceeds 200 km/h:

2.2.1.2 Steps for Marked Speed Indication:

[Requirement: Marked Speed at intervals not exceeding 30 (km/h only)]

(5.1.1)

2.2.1 & 2 Steps for Marked Graduations (Analogue Scales only):

2.2.1&2, (5.1.1 & 2) [Requirement: marking to be in steps of 1, 2, 5 or 10 (km/h and mph)]

TEST CONDITIONS

2.3.1 Tyre size and pressures - SEE VEHICLE SPECIFICATION TABLE

Yes

2.3.4, Tyre pressure for test were at Manufacturer's quoted pressure plus 0.2 bar:

Yes

(5.2.4)

2.3.6.1 Track condition: Flat and Dry

Yes

(5.2.6.1)



TEST REPORT: SPEEDOMETER

Directive 2000/7/EC Regulation
39.00 (Revision 1 Supp 9)

2.3.3 (5.2.3)	Speedometer temperature with range $23 \pm 5^\circ\text{C}$: ambient temp = 17°C	Yes
Manufacturer's quoted mass in running order (fuel and rider) - ref 70/156/EEC Annex 1 para 2.6 (minimum value for model range): Front axle: 70kg Rear Axle: 99kg	169 kg	Yes
Test vehicle masses: Front axle: 70kg Rear Axle: 99kg	169 kg	Yes
		Yes

2.3.2 RESULTS	Load on axle(s) driving speedometer correspond to quoted axle mass(es)	Yes
-------------------------	--	-----

Requirement:

$$0 \leq V_1 - V_2 \leq (V_2/10) + 4 \text{ km/h}$$

2.3.5 (5.3)	Test No	Indicated Speed V_1 (km/h)	True Speed (km/h)			$V_1 - V_2$	$(V_2/10) + 4 \text{ km/h}$				
			East	West	Average V_2						
TEST RESULTS FOR TYRE SIZE:											
Tyre Rolling Radius: mm or Tyre Revs/km:*											
		35									
		80									
		120 ¹⁾									
TEST/CALCULATED* RESULTS FOR TYRE SIZE:											
Tyre Rolling Radius: 220.7mm or Tyre Revs/km:											
		36	34.0	34.3	34.2	1.8	7.42				
		20	18.7	18.9	18.8	1.2	5.88				
TEST/CALCULATED* RESULTS FOR TYRE SIZE:											



**TEST REPORT:
SPEEDOMETER**

Directive 2000/7/EC Regulation
39.00 (Revision 1 Supp 9)

Tyre Rolling Radius: mm or Tyre Revs/km:*						
TEST/CALCULATED* RESULTS FOR TYRE SIZE:						
Tyre Rolling Radius: mm or Tyre Revs/km:*						

Note: Above results valid for all tyre sizes with rolling radii between ... mm and .. mm

* Delete as appropriate

2.3.5 (5.2.5).	¹⁾ Test speed 120 km/h or 80% of maximum speed if maximum is less than 150 km/h	N/A
-------------------	--	-----

Notes:

For given actual road speed measured during the test the revised indicated speed for an alternative tyre size =

$$\text{Indicated Speed For Test} \times \frac{\text{Test Tyre Rolling Rad mm}}{\text{Alternative Tyre Rolling Rad mm}}$$

OR

$$\text{Indicated Speed For Test} \times \frac{\text{Alternative Tyre Revs/km}}{\text{Test Tyre Revs/km}}$$

This assumes that the same speedo drive ratios and (where relevant) transmission ratios are the same for all tyre sizes covered by the calculations

NB: Maybe tested on rolling road if roll diameter > 400mm for mopeds, > 2000mm for other vehicles.

Remarks (if applicable): None



TEST REPORT:
SPEEDOMETER

Directive 2000/7/EC Regulation
39.00 (Revision 1 Supp 9)



TR/M/C/EWVTA ITEM 45/00

Revision 2
28 February 2012

Report/Job
Number:CWS378045
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23-May-17

Test Report: Identification of Controls, Tell-tales and Indicators for Two and Three Wheel Motor Vehicles

Legislation

EC Directive 2009/80/EC

Test Details

Location of Test: Nanchang Motorcycle Quality Inspection and Testing Institute
Date of Test: 24 November 2016
VCA Representative(s): Du Song
Manufacturer's Representative(s): Mr. Xu
Reason for Test Report: New approval

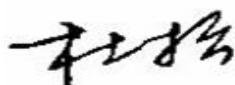
Manufacturer Details

Name and Address: Jiangsu Xinri E-Vehicle Co.,Ltd.
Type: No.501, Xishan Road, Anzhen Town, Xishan District, Wuxi City, Jiangsu, P.R.China
Commercial Description: HAWK
Category: L1e

Conclusion

The above mentioned vehicle was tested in accordance with the above mentioned legislation and was found to comply in all respects.

Signature:



Name: Du Song
Position: Type Approval Engineer
Date: 12 December 2016

List of Annexes

Annex	No of Pages	Subject
I		
II		

Worst Case Rationale

Single specification

Tests Required

Yes, NA, See Report ... / Approval ... / Annex ...

Designation and Identification of Symbols:

See report

Vehicle Specification

Vehicle Identification Number:

Variant 1:☆LXRBE0GW1H0901369☆
Variant 2:☆LXRBE0GX4H0900001☆
Variant 3:☆LXRBE0GY3H0900001☆
Variant 4:☆LXRBE0GZ2H0900001☆

Manufacturer's Documentation

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

Yes

Facility and Equipment Checks

Calibration certificates checked and valid, recorded in the following table:

N/A

Equipment	Serial / Certificate No.	Calibration due*

*Specify calibrated date + (interval) or calibration due date.

Complies
Yes / NA

Test Requirements

Ann I

Where fitted, the controls, tell-tales and indicators are identified by the symbols designated for them in Annex I.

Yes



Framed areas may be solid

Figure 1: Main Beam Headlamp

Control and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.

Yes

Requirement	Control	Tell-tale
Fitted	Yes	[Required]
Symbol (o)n or (c)lose to device	On	On
Illumination/Colour	No requirement	Blue

Note: Symbol with four lines is also acceptable.

Remarks:



Framed areas may be solid

Figure 2: Dipped Beam Headlamp

Control and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.

Yes

Requirement	Control	Tell-tale
Fitted	Yes	No
Symbol (o)n or (c)lose to device	On	No
Illumination/Colour	No requirement	Green

Note: Symbol with four lines is also acceptable.

Remarks:



Framed areas may be solid

Figure 3: Direction Indicator

Control and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.

Yes

Requirement	Control	Tell-tale
Fitted	Yes	[Required, unless audible warning fitted]
Symbol (o)n or (c)lose to device	C	On
Illumination/Colour	No requirement	Green

Note: The pair of arrows is a single symbol. When the controls or tell-tales for left and right-turn operate independently, however, the two arrows may be considered separate symbols and be spaced accordingly.

Remarks:

Figure 4: Hazard Warning Device





*Framed areas
may be solid*

Control and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.

N/A

Requirement	Control	Tell-tale
Fitted	No	[Required]
Symbol (o)n or (c)lose to device	NO	No
Illumination/Colour	Mandatory	Red

Note: Tell-tale is not required when arrows of the direction indicator tell-tales that otherwise operate independently flash simultaneously as hazard warning tell-tale.

Remarks:

Figure 5: Choke

Control and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.

N/A



Requirement	Control	Tell-tale
Fitted		
Symbol (o)n or (c)lose to device		
Illumination/Colour	No requirement	Amber

Remarks:

Figure 6: Audible Warning Device

Control is visible, clear and has the correct symbol and illumination, as detailed below.

Yes



Outline is also permitted

Requirement	Control
Fitted	Yes
Symbol (o)n or (c)lose to device	On
Illumination	No requirement

Remarks:

Figure 7: Fuel Level

Indicator and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.

N/A



Outline is also permitted

Requirement	Indicator	Tell-tale
Fitted		
Symbol (o)n or (c)lose to device		
Illumination/Colour	Mandatory	Amber

Remarks:

Figure 8: Engine Coolant Temperature

Indicator and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.



N/A

Requirement	Indicator	Tell-tale
Fitted		
Symbol (o)n or (c)lose to device		
Illumination/Colour	Mandatory	Red

Remarks:

Figure 9: Battery Charge

Indicator and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.



Yes

Requirement	Indicator	Tell-tale
Fitted	Yes	Yes
Symbol (o)n or (c)lose to device	On	On
Illumination/Colour	Mandatory	Red

Remarks:

Figure 10: Engine Oil

Indicator and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.



N/A

Requirement	Indicator	Tell-tale
Fitted		
Symbol (o)n or (c)lose to device		
Illumination/Colour	Mandatory	Red

Remarks:

Figure 11: Front Fog Lamps



Framed areas
may be solid

Control and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.

N/A

Requirement	Control	Tell-tale
Fitted		
Symbol (o)n or (c)lose to device		
Illumination/Colour	No requirement	Green

Remarks:

Figure 12: Rear Fog Lamps



Framed areas
may be solid

Control and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.

N/A

Requirement	Control	Tell-tale
Fitted		[Required]
Symbol (o)n or (c)lose to device		
Illumination/Colour	No requirement	Amber

Remarks:

Figure 13: Engine Ignition Cut-off in 'Out of Use' Position



Control is visible, clear and has the correct symbol and illumination, as detailed below.

Yes

Requirement	Control
Fitted	Yes
Symbol (o)n or (c)lose to device	On
Illumination	Mandatory

Remarks:

Figure 14: Engine Ignition Cut-off in 'Operating' Position



Control is visible, clear and has the correct symbol and illumination, as detailed below.

Yes

Requirement	Control
Fitted	Yes
Symbol (o)n or (c)lose to device	On
Illumination	No requirement

Remarks:

Figure 15: Lighting Switch



Framed areas
may be solid

Control and/or tell-tale are visible, clear, and have the correct symbol, illumination and colour, as detailed below.

Yes

Requirement	Control	Tell-tale
Fitted	Yes	[Required]
Symbol (o)n or (c)lose to device	On	No
Illumination/Colour	No requirement	Green

Remarks: None



Framed areas
may be solid

Figure 16: Position (Side) Lamps

Control and/or tell-tale are visible, clear and have the correct symbol, illumination and colour, as detailed below.

Yes

Requirement	Control	Tell-tale
Fitted	Yes	[Required]
Symbol (o)n or (c)lose to device	On	Via panel lights
Illumination/Colour	Not required	Green

Note: Control may be identified by Figure 15.

Tell-tale not required if instrument panel lights are lit automatically on activation of the lighting switch.

Remarks: None



Figure 17: 'Gearbox in Neutral' Indicator

Tell-tale is visible, clear and has the correct symbol and colour, as detailed below.

N/A

Requirement	Tell-tale
Fitted	
Symbol (o)n or (c)lose to device	
Colour	Green

Remarks:

Figure 18: Electric Starter

Control is visible, clear and has the correct symbol and illumination, as detailed below.

N/A



Requirement	Control
Fitted	
Symbol (o)n or (c)lose to device	
Illumination	No requirement

Remarks: None

Vehicle specification includes controls, tell-tales or indicators not listed in Annex I.

Yes

- Details:
1. Odometer-indicator -on speedometer display
 2. Gear shift (high and low)- Control
 3. Bule tooth -on speedometer display



VCA, 1 Eastgate Office Centre,
Eastgate Road, Bristol, BS5 6XX, United Kingdom
enquiries@vca.gov.uk | www.dft.gov.uk/vca | +44(0)1179515151

Report Number: CWS378045

Issue: 0

None

Symbol(s) used does not cause confusion with those listed in Annex I.

Yes





VCA, 1 Eastgate Office Centre,
Eastgate Road, Bristol, BS5 6XX, United Kingdom
enquiries@vca.gov.uk | www.dft.gov.uk/vca | +44(0)1179515151

Report Number: CWS378045

Issue: 0

Remarks

None

Note: VCA apply measurement uncertainty to calibrated items but not test results.



23-May-17

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Test Report: Statutory Markings for Two or Three Wheel Motor Vehicles

Legislation

EC Directive 2009/139/EC

Test Details

Location of Test: Nanchang Motorcycle Quality Inspection and Testing Institute
Date of Test: 15 November 2016
VCA Representative(s): Du Song
Manufacturer's Representative(s): Mr. Xu
Reason for Test Report: New approval

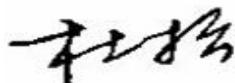
Manufacturer Details

Name and Address: Jiangsu Xinri E-Vehicle Co.,Ltd.
No.501, Xishan Road, Anzhen Town, Xishan District, Wuxi
City, Jiangsu, P.R.China
Type: HAWK
Commercial Description: Refer to manufacturer's documentation
Category: L1e

Conclusion

The above mentioned vehicle was tested in accordance with the above mentioned legislation and was found to comply in all respects.

Signature:



Name: Du Song
Position: Type Approval Engineer
Date: 12 December 2016

List of Annexes

Annex	No of Pages	Subject
I		
II		

Worst Case Rationale

Four variants

Tests Required

	Yes, NA, See Report ... / Approval ... / Annex ...
Manufacturer's Data Plate:	Yes
Vehicle Identification Number:	Variant 1:☆LXRBE0GW1H0901369☆ Variant 2:☆LXRBE0GX4H0900001☆ Variant 3:☆LXRBE0GY3H0900001☆ Variant 4:☆LXRBE0GZ2H0900001☆
Characters:	Capital Latin letters and Arabic numbers

Vehicle Specification

Vehicle Identification Number:	Variant 1:☆LXRBE0GW1H0901369☆ Variant 2:☆LXRBE0GX4H0900001☆ Variant 3:☆LXRBE0GY3H0900001☆ Variant 4:☆LXRBE0GZ2H0900001☆
Drawing Number(s):	Drawing No. HAWK-13
Plate Material:	Metal plate
Printing/Marking Method:	Riveted

Manufacturer's Documentation

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

Yes

Facility and Equipment Checks

Calibration certificates checked and valid, recorded in the following table:

N/A

Equipment	Serial / Certificate No.	Calibration due*

*Specify calibrated date + (interval) or calibration due date.

Complies
Yes / NA

Test Requirements

Manufacturer's Data Plate

<i>Ann I, 2.1.</i>	Plate conforms to the model shown in Appendix 1. It is firmly attached in an accessible position to a part not subject to replacement.	Yes
<i>Ann I, 4.2.2.2.</i>	Characters are at least 3 mm high.	Yes
<i>Ann I, 2.1.</i>	The following information is clearly and indelibly marked on the plate in the order listed:	Yes
<i>Ann I, 2.1.1.</i>	Name of manufacturer;	Yes
<i>Ann I, 2.1.2.</i>	Type approval number;	Yes
<i>Ann I, 2.1.3.</i>	Vehicle identification number;	Yes
<i>Ann I, 2.1.4.</i>	Stationary sound level: [redacted] db(A) [redacted] rev/min	N/A
<i>Ann I, 2.3.</i>	Additional information (where applicable) is only marked outside the clearly marked rectangle below or to the side of the prescribed inscriptions.	Yes
<i>Ann I, 2.3.</i>	Prescribed rectangle only encloses the information described in items 2.1.1 - 2.1.4 above.	Yes

Vehicle Identification Number

On the Plate

<i>Ann I, 3.1.1.</i>	Number consists of three sections.	Yes
<i>Ann I, 3.1.1.1.</i>	The first has three characters, which identify the manufacturer.	Yes
<i>Ann I, 3.1.1.2.</i>	The second has six characters, which indicate the general characteristics of the vehicle. <i>Note: For mopeds – Type, variant and version; For other vehicles – type and variant.</i>	Yes
<i>Ann I, 3.1.1.3.</i>	The third has eight characters (of which the last four are numerical), which identifies the particular vehicle.	Yes
<i>Ann I, 3.1.2.</i>	There are no spaces between the characters.	Yes
<i>Ann I, 3.1.2.</i>	The number is marked on one line only.	Yes
<i>3.1.2.</i>	If marked on two lines, the valid technical reason why it is not marked on one line only is:	N/A UK Vehicle Approval Authority Certification Agency



23-May-17

Page 3 of 4

<i>Ann I, 3.1.2.</i>	No section is divided between the two lines.	N/A
<i>Ann I, 3.1.2.</i>	The beginning and end of each line is indicated by a symbol, which is neither an Arabic numeral nor a Latin capital letter.	N/A

On the Chassis/Frame

<i>Ann I, 3.1.</i>	Number is hammered or punched on the right-hand side of the chassis or frame and is easily accessible.	Yes
--------------------	--	-----

<i>Ann I, 3.</i>	Marking has been designed to last 30 years.	Yes
------------------	---	-----

<i>Ann I, 4.2.2.1.</i>	Characters are at least 7 mm high.	Yes
------------------------	------------------------------------	-----

<i>Ann I, 3.1.1.</i>	Number consists of three sections, as described in the section above.	Yes
----------------------	---	-----

<i>Ann I, 3.1.2.</i>	There are no spaces between the characters.	Yes
----------------------	---	-----

<i>Ann I, 3.1.2.</i>	The number is marked on one line only.	Yes
----------------------	--	-----

<i>Ann I, 3.1.2.</i>	If marked on two lines, the valid technical reason why it is not marked on one line only is:	N/A
----------------------	--	-----

<i>Ann I, 3.1.2.</i>	No section is divided between the two lines.	N/A
----------------------	--	-----

<i>Ann I, 3.1.2.</i>	The beginning and end of each line is indicated by a symbol, which is neither an Arabic numeral nor a Latin capital letter.	N/A
----------------------	---	-----

Characters

<i>Ann I, 4.1.</i>	Characters used are Roman letters and Arabic numerals.	Yes
--------------------	--	-----

<i>Ann I, 4.1.</i>	Manufacturer's name and VIN are marked in capital letters.	Yes
--------------------	--	-----

<i>Ann I, 4.2.1.</i>	Characters do not include I, O, Q, dashes, asterisks, and other special signs.	Yes
----------------------	--	-----

Remarks

None

Note: VCA apply measurement uncertainty to calibrated items but not test results.

