

VCA Headquarters 1 The Eastgate Office Centre Eastgate Road Bristol, BS5 6XX United Kingdom

Switchboard: +44 (0) 117 951 5151 Main Fax: +44 (0) 117 952 4103 Email: <u>enquiries@vca.gov.uk</u> Web: www.vca.gov.uk

02 SEPTEMBER 2009

Dear Sir / Madam,

Reference Approval Number: e11\*2002/24\*0892\*00

Communication of approvals in accordance with Directive 2002/24/EC.

Please find enclosed the above-mentioned document certifying the homologation of the vehicle in accordance with Directive 2002/24/EC.

Yours faithfully

Stenn

A.W. STENNING Head of Technical & Quality Group





VCA Headquarters 1 The Eastgate Office Centre Eastgate Road Bristol, BS5 6XX United Kingdom

Switchboard: +44 (0) 117 951 5151 Main Fax: +44 (0) 117 952 4103 Email: <u>enquiries@vca.gov.uk</u> Web: www.vca.gov.uk

#### THE UNITED KINGDOM VEHICLE APPROVAL AUTHORITY EC TYPE-APPROVAL CERTIFICATE

Communication concerning Type-Approval of a type of vehicle with regard to Directive 2002/24/EC

Type-Approval number: e11\*2002/24\*0892\*00

Reason for extension: N/A

- 0. GENERAL
- 0.1. Make(s) (trade name of the manufacturer): XIAOFEILU
- 0.2. Type: HRTK122 Variant 1: Lithium battery Variant 2: Silicon battery
- 0.2.1. Commercial name(s): TIANKE
- 0.3. Means of identification of type, if marked on the vehicle: N/A
- 0.3.1. Location of that marking: N/A
- 0.4. Category <sup>(2)</sup>: L3e
- 0.5. Name and address of the vehicle manufacturer: SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO,.LTD No.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan District, Shanghai Province, PEOPLE'S REPUBLIC OF CHINA
- 0.5.1. Name(s) and address(es) of assembly plant(s): SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO,.LTD No.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan District, Shanghai Province, 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 the technical requirements of all the relevant separate Directives (as last amended) listed in the table of Annex I to Directive 2002/24/EC.

The approval is GRANTED

Place: BRISTOL

Signature:

A Stenn

A.W STENNING Head of Technical & Quality Group

#### Date: 02 SEPTEMBER 2009

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.

<sup>(1)</sup> Delete where not applicable.

<sup>(2)</sup> According to the classification introduced in Article 1.

CSK206080

02-Sep-



VCA Headquarters I The Eastgate Office Centre Eastgate Road Bristol, BS5 6XX United Kingdom

 Switchboard:
 +44 (0) 117 951 5151

 Direct line:
 +44 (0) 117 952

 Main Fax:
 +44 (0) 117 952 4103

 Email:
 enquiries@vca.gov.uk

 Web:
 www.vca.gov.uk

APPROVAL NUMBER: e11\*2002/24\*0892\*00

#### INFORMATION PACKAGE CONTENTS

INDEX

#### **REVISION NUMBER: Not applicable**

Total number of sheets: 53 (Fifty-three)

Number of separate drawings: 0 (Nil)

Number of separate photographs: 0 (Nil)

Reasons for Revision: Not applicable

#### CSK206080

Revision date & Office stamp



An executive agency of the Department for Transport



### **ANNEX VII – TEST RESULTS**

e11\*2002/24\*0892\*00

(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: The electric motorcycle don't conduct the emission, sound level tests.

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

Variant/version : Moving dB(A) : Stationary dB(A) : at (min\_1) :

2. Results of the exhaust emission tests according to Directive 97/24/EC Chapter 5 Annex II, asamended by 2006/120/EC-

Variant/version :

2.1. Type I

CO(a/km).
HC (a/km) (1)
NOx (g/km) (1) ·
$HC \perp NOx (a/km) (2)$

2.2 Type II

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

3. Compression ignition engine : Variant/version : Corrected value of absorption coefficient: (m-1)-

CO at Idle



Information document: 2002 /24- HRTK122-00 Application date: June 2, 2009

#### Dear Sirs

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

<sup>1</sup>delete where applicable

Vehicle type	:	HRTK122
Vehicle category	:	Two-wheel Motorcycle
Name and address	:	SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO.,LTD.
manufacturer		N0.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China
Name and address of manufacturers representative	:	n.a.

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,

Fuliping



SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO., LTD.



- -

Information document: 2002 /24-HRTK122-00 Application date: June 2, 2009

Document information about : Two- wheel motorcycle Reference number of information document: 2002 /24-HRTK122-00 Application date: June 2, 2009

#### LIST OF CONTENT

#### I. 2002/24 INFORMATION DOCUMENT – GENERAL INFORMATION

#### **II. CONTENT OF DRAWINGS**

Drawing no.	Drawing subject	Drawing page	
HRTK122-01	Complete vehicle-dimension	1.	
HRTK122-02	Battery installation	2.	
HRTK122-03	Speedometer	3.	
HRTK122-04	Front fork Suspension	4.	
HRTK122-05	Rear Suspension	5.	
HRTK122-06	Brake System	6.	
HRTK122-07	Front brake pads assy.	7.	
HRTK122-08	Rear brake pads assy.	8.	
HRTK122-09	Front brake pad	9.	
HRTK122-10	Rear brake pad	10.	
HRTK122-11	Front Brake Lever	11.	
HRTK122-12	Rear Brake Lever	12.	
HRTK122-13	Hydraulic Reservoir	13.	
HRTK122-14	Lighting Installation	14.	
HRTK122-15	Control I.D., Indicator and Tell-tale	15.	
HRTK122-16	Location of the Statutory Inscription and the	16.	
HRTK122-17 (1)	Manufacturer's data plate (1)	17	
HPTK122-17 (2)	Manufacturer's data plate (1)	18	
		10.	
		19.	
	Point Installation	20.	
	Mirror Desition	21.	
	Mirror Installation	22.	
	Stond	23.	
	Sidilu Hand hald	24.	
	Anti Tempering Centrel Plate	20.	
		20.	
		27.	
HR1K122-27 (1)	Structure of VIN (1)	28.	
HRIK122-27 (2)	Structure of VIN (2)	29.	
HRTK122-28	Controller	30.	
HRTK122-29	Electric engine	31.	
HRTK122-30	Wires Diagram	32.	

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



Information document: 2002 /24-HRTK122-00 Application date: June 2, 2009

#### 2002/24/EC ANNEX II INFORMATION DOCUMENT <sup>(a)</sup> PART 1A. INFORMATION RELATING JOINTLY TO MOPEDS, MOTOR CYCLES, MOTOR TRICYCLES AND QUADRICYCLES

0.	General		
0.1.	Make	:	XIAOFEILU
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)	:	HRTK122
	Variant	:	Variant 1: Lithium battery Variant 2: Silicon battery
	Version	:	n.a.
0.2.1.	Commercial name (where applicable)	:	TIANKE
0.3.	Means of type identification if stated on vehicle <sup>(b)</sup>	:	n.a.
0.3.1.	Location of that means of identification	:	n.a.
0.4.	Vehicle category <sup>(C)</sup>	:	L3e
0.5.	Name and address of manufacturer	:	SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO., LTD.
			N0.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China
0.5.1.	Name(s) and addresse(s) of assembly plants	:	SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO., LTD.
			N0.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China
0.6.	Name and address of manufacturer's authorised representative, if any	:	n.a.
0.7.	Location and method of affixing statutory inscriptions to the chassis	:	Statutory inscription affixed on the right side of frame and near the main stand bracket; VIN number stamped on the right side of chassis
0.7.1.	The serial numbering of the type	:	Variant1: LXDT1ZW0□97000001
	begins with No		Variant2: LXDTXZW0 97000001
			The ninth character" "means check number calculated automatically by VIN-print system, possible character including :"0.1.2.3.4.5.6.7.8.9.X"
0.8.	Position and method of affixing the	:	Mark on the surface of the component and
-	component type-approval mark for		made by molding
	components and separate technical		

02-Sep-09

Information document: 2002 /24-HRTK122-00 Application date: June 2, 2009

units

1.	General arrangement of the vehicle					
1.1.	Photos and/or drawings of a typical vehicle	:	Refer to drawing No. HRTK122-0			
1.2.	Dimensional drawing of the complete vehicle	:	Refer to drawing No.	HRTK1	22-01	
1.2.1.	Wheelbase	:	1440mm			
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	:	In the centre of rear	wheel		
1.5.	Number of seating positions	:	2			
1.6.	Hand of drive - left or right <sup>(1)</sup>					
1.6.1.	Vehicle is equipped to be driven in right-hand or left-hand rule of the road traffic <sup>(1)</sup>		Left and Right			
2.	Masses (in kg) <sup>(2)</sup>		Lithium	Silicon	1	
2.0.	Unladen mass <sup>(d) (i)</sup>	:	132	172		
2.1.	Mass of vehicle in running order <sup>(i)</sup>	:	132	172		
2.1.1.	Distribution of that mass between the axles	:	Front: 58 Rear: 74	Front: Rear:	77 95	
2.2.	Mass of vehicle in running order , together with rider	:	207	247		
2.2.1.	Distribution of that mass between the axles	:	Front: 100 Rear: 107	Front: Rear:	114 133	
2.3.	Maximum technically permissible mass declared by the manufacturer	:	282	322		
2.3.1.	Division of that mass between the	:	Front: 110	Front:	128	
	axles		Rear: 172	Rear:	194	
2.3.2.	Maximum technically permissible	:	Front: 110	Front:	128	
	mass on each of the axles		Rear: 172	Rear:	194	
2.4.	Maximum hill-starting ability at the maximum technically permissible mass declared by the manufacturer	:	30%			
2.5.	Maximum towable mass (where applicable)	:	n.a.			
2.6.	Maximum mass of the combination	:	n.a.			
3.	Engine <sup>(e)</sup>					
3.0.	Manufacturer	:	Lugiao Aluminium Co	o., Ltd.		

- -



3.1.	Make	:	QUANSHUN
3.1.1.	Type (stated on the engine, or other means of identification)	:	60V50080
3.1.2.	Location of engine number (if applicable)	:	Side face of motor, Refer to drawing No. HRTK122-29
3.2.	Spark- <del>or compression</del> -ignition engine <sup>(1)</sup>	:	n.a.
3.2.1.	Specific characteristics of the engine		
3.2.1.1.	Operating cycle (four or two-stroke, spark or compression ignition) <sup>(1)</sup>	:	n.a.
3.2.1.2.	Number, arrangement and firing order of cylinders	:	n.a.
3.2.1.2.1.	Bore <sup>(f)</sup>	:	n.a.
3.2.1.2.2.	Stroke <sup>(f)</sup>	:	n.a.
3.2.1.3.	Cylinder capacity <sup>(g)</sup>	:	n.a.
3.2.1.4.	Compression ratio <sup>(2)</sup>	:	n.a.
3.2.1.5.	Drawings of cylinder head, piston(s), piston rings and cylinder(s)	:	n.a.
3.2.1.6.	Idling speed	:	n.a.
3.2.1.7.	Maximum net power output	:	n.a.
3.2.1.8.	Net maximum torque	:	n.a.
3.2.2.	Fuel	:	n.a.
3.2.3.	Fuel tank		
3.2.3.1.	Maximum capacity <sup>(2)</sup>	:	n.a.
3.2.3.2.	Drawing of tank with indication of material used	:	n.a.
3.2.3.3.	Diagram clearly indicating the position of the tank on the vehicle	:	n.a.
3.2.3.4.	Approval number of the fuel tank fitted	:	n.a.
3.2.4.	Fuel supply		
3.2.4.1.	Via carburettor(s)	:	n.a.
3.2.4.1.1.	Make(s)	:	n.a.
3.2.4.1.2.	Type(s)	:	n.a.
3.2.4.1.3.	Number fitted	:	n.a.
3.2.4.1.4.	Settings (2)		
	i.e. of		
3.2.4.1.4.1.	Diffusers	:	n.a.
3.2.4.1.4.2.	Level in float chamber	:	n.a.
3.2.4.1.4.3.	Mass of float	:	n.a.
3.2.4.1.4.4.	Float needle	:	n.a.
	or		



3.2.4.1.4.5.	Fuel curve as a function of the air flow and setting required in order to maintain that curve	:	n.a.
3.2.4.1.5.	Cold-starting system <sup>(1)</sup>	:	n.a.
3.2.4.1.5.1.	Operating principle(s)	:	n.a.
3.2.4.2.	By fuel injection (solely in the case of compression ignition) (yes/no)	:	n.a.
3.2.4.3.	By fuel injection (solely in the case of spark-ignition)	:	n.a.
3.2.4.4.	Fuel pump	:	n.a.
3.2.5.	Electrical equipment		
3.2.5.1.	Nominal voltage	:	n.a.
3.2.5.2.	Generator		
3.2.5.2.1.	Туре	:	n.a.
3.2.5.2.2.	Nominal power	:	n.a.
3.2.6.	Ignition		
3.2.6.1.	Make(s)	:	n.a.
3.2.6.2.	Type(s)	:	n.a.
3.2.6.3.	Operating principle	:	n.a.
3.2.6.4.	Ignition advance curve or operating set point <sup>(2)</sup>	<u>:</u>	n.a.
3.2.6.5.	Static timing <sup>(2)</sup>	:	n.a.
3.2.6.6.	Points gap <sup>(2)</sup>	:	n.a.
3.2.6.7.	Dwell angle <sup>(2)</sup>	:	n.a.
3.2.6.8.	Anti-radio interference system		
3.2.6.8.1.	Terminology and drawing of anti-radio interference equipment	:	n.a.
3.2.6.8.2.	Indication of the nominal DC resistance value and, in the case of resistive ignition leads, statement of nominal resistance per metre	:	n.a.
3.2.7.	Cooling system ( <del>liquid/</del> air ) <sup>(1)</sup>		
3.2.7.1.	Nominal setting for the engine-temperature control device	:	n.a.
3.2.7.2.	Liquid		
3.2.7.2.1.	Nature of liquid	:	n.a.
3.2.7.2.2.	Circulating pump(s)	:	n.a.
3.2.7.3.	Air		
3.2.7.3.1.	Blower	:	n.a.
3.2.8.	Induction system		
3.2.8.1.	Supercharging	:	n.a.
3.2.8.1.1.	Make(s)	:	n.a.



3.2.8.1.2.	Type(s)	:	n.a.
3.2.8.1.3.	Description of system [example: maximum boost pressure in kPa, waste gate (where appropriate)]	:	n.a.
3.2.8.2.	Intercooler	:	n.a.
3.2.8.3.	Description and drawings of induction pipe work and accessories (plenum chamber, heating device, additional air intakes, etc.)	:	n.a.
3.2.8.3.1.	Description of induction manifold (with drawings and/or photos)	:	n.a.
3.2.8.3.2.	Air filter, drawings	:	n.a.
	or		
3.2.8.3.2.1.	Make(s)	:	n.a.
3.2.8.3.2.2.	Type(s)	:	n.a.
3.2.8.3.3.	Inlet silencer, drawings	:	n.a.
328331	Make(s)		na
328332			n a
3.2.9.	Exhaust system	-	
3.2.9.1.	Drawing of complete exhaust system	:	n.a.
3.2.10.	Minimum cross-section of the inlet and exhaust ports	:	n.a.
3.2.11.	Induction system or equivalent data		
3.2.11.1.	Maximum valve lift, opening and closing angles in relation to the dead centres, or data concerning the settings of other possible systems	:	n.a.
3.2.11.2.	Reference and/or setting ranges <sup>(1)</sup>	:	n.a.
3.2.12.	Anti-air pollution measures adopted		
.3.2.12.1.	Crankcase-gas recycling device, solely in the case of four-stroke engines (description and drawings)	:	n.a.
3.2.12.2.	Additional anti-pollution devices (where present and not included under another heading)	:	n.a.
3.2.12.2.1.	Description and/or drawings	:	n.a.
3.2.13.	Location of the coefficient of absorption symbol (compression-ignition engines only)	:	n.a.
3.3.	Electric traction motor		
3.3.1.	Type (winding, excitation)	:	Winding
3.3.1.1.	Maximum continuous rated power <sup>(k)</sup>	:	5000w



3.3.1.2.	Operating voltage	:	60V	
3.3.2.	Battery		Lithium	Silicon
3.3.2.1.	Number of cells	:	5 groups: One battery has 6 cells, one group has two batteries	5 groups: One battery has 6 cells, one group has two batteries
3.3.2.2.	Mass	:	Total:31kg	Total:65kg
3.3.2.3.	Capacity	:	Total:38Ah	Total:46Ah
3.3.2.4.	Location	:	In the middle of the vehicle Refer to drawing	In the middle of the vehicle Refer to drawing No.
3.4.	Other motors or combinations of motors (specific information concerning the parts of those motors)	:	n.a.	HKTK122-02
3.5.	Cooling system temperatures permitted by the manufacturer	:	n.a.	
3.6.	Lubrication system	:	n.a.	
4.	Transmission <sup>(h)</sup>			
4.1.	Diagram of transmission system	:	n.a.	
4.2.	Type (mechanical, hydraulic, electrical, etc.)	:	n.a.	
43	Clutch (type)		na	
4.0.	Gearbox	:	n a	
441			na	
442	Method of selection		na	
4.5.	Gear ratios	:	n.a.	
4.5.1.	Brief description of the electrical and/or electronic components used in the transmission	:	n.a.	
4.6.	Maximum speed of vehicle and gear in	:	Lithium	Silicon
	which it is reached (in km/h) <sup>(i)</sup>		80 km/h, n.a.	80 km/h, n.a.
4.7.	Speedometer			
4.7.1.	Make(s)	:	GUIDU	
4.7.2.	Type(s)	:	HRTK122	
4.7.3.	Photographs and/or drawings of the complete system	:	Refer to drawing	No.HRTK122-03
4.7.4.	Speed range displayed	:	0~100km/h,0~60r	nph
4.7.5.	Tolerance of the measuring mechanism of the speedometer	:	+5km/h	



4.7.6.	Technical constant of the speedometer	:	8.35 rpm/degree
4.7.7.	Method of operation and description of the drive mechanism	:	Front wheel makes worm wheel turn to drive worm, soft-axes to meter worm
4.7.8.	Overall transmission ratio of the drive mechanism	:	22:12
5.	Suspension		
5.1.	Drawing of suspension arrangement	:	Refer to drawing No. HRTK122-04, HRTK122-05
5.1.1.	Brief description of the electrical and/or electronic components used in the suspension	:	n.a.
5.2.	Tyres (category, dimensions and maximum loading) and rims (standard type)	:	

	Tire	Approval No.	Rolling circumfe	erence	Tire Pressure	Rim size
Front	130/60-13 53J	E4-75R-0002525	1486mm	า	225Kpa	3.50×13
Rear	130/60-13 53J	E4-75R-0002525	1486mm	า	225Kpa	3.50×13
5.2.1.	Nominal ro	lling circumference	:	See sec	tion 5.2 table	
5.2.2.	Tyre press manufactu	ures recommended by rer	the :	See sec	tion 5.2 table	
5.2.3.	Tyre/whee	l combinations	:	See sec	tion 5.2 table	
5.2.4.	Minimum-s compatible maximum	speed category symbol with the theoretical design speed of the ve	: hicle	F		
5.2.5.	Minimum le maximum	oad-capacity index with load on each tyre	n the :	Front:37 Rear:51	,	
5.2.6.	Categories vehicle	of use compatible for	the :	Normal		
6.	Steering					
6.1.	Steering g	ear and control				
6.1.1.	Type of ge	ar	:	Telesco controlle	pic fork steering ed by driver	stem manual
6.1.2.	Brief descr and/or elec the steerin	iption of the electrical ctronic components use g system	: ed in	n.a.		
7.	Braking					
7.1.	Diagram o	f braking devices	:	Refer to	drawing No. HR	TK122-06
7.2.	Front disc.	<del>/ drum</del> brake <sup>(1)</sup>		Front: di	isc	



Information document: 2002 /24-HRTK122-00 Application date: June 2, 2009

	Rear disc / <del>-drum-</del> brake <sup>(1)</sup>		Rear: disc
7.2.1.	Make(s)	:	Front: Rui'an City ZhanXiang Motor Parts Co., Ltd. Rear: Rui'an City ZhanXiang Motor Parts Co.,
			Ltd.
7.2.2.	Type(s)	:	Front: 220-3
			Rear: 220-3
7.3.	Drawing of parts of the brake system		
7.3.1.	Shoes and/or pads $^{(1)}$	:	Refer to drawing No.
	·		HRTK122-07, HRTK122-08,
7.3.2.	Linings and/or pads (Indicate make.	:	Refer to drawing No.
	grade of material or identification mark) <sup>(1)</sup>		HRTK122-09, HRTK122-10
7.3.3.	Brake levers and/or pedals <sup>(1)</sup>	:	Refer to drawing No.
	·		HRTK122-11, HRTK122-12
7.3.4.	Hydraulic reservoirs (where applicable)	:	Refer to drawing No. HRTK122-13
7.4.	Other devices (where applicable)	:	n.a.
	drawing and description	:	n.a.
7.5.	Brief description of the electrical and/or electronic components used in the braking system	:	n.a.
8.	Lighting and light-signalling devices		

#### 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)

Name	Qty	Tell tale	Color	MAX INT.	Make Model	Туре	Type-approval mark
Main beam	2	blue	white	22500cd	DAYANG	DYDS-D02	E11-113R-000067
Dipped beam	2	/	white	/		DYDS-D02	E11-113R-000067
Front position lamp	1	Via Panel Iamp	white	/		DYDS-W02Q	E11-50R-001198
Front direction indicator	2	green	amber	/		DYDS-Z02Q	E11-50R-001199
Rear direction indicator	2	green	amber	/		DYDS-Z02H	E11-50R-001200
Stop lamp	1	/	red	/		DYDS-H02	E11-50R-001416
Rear position lamp	1	Via Panel Iamp	red	/		DYDS-H02	E11-50R-001416

:



Rear registration plate	1	/	white	/				DYDS-H02	E11-50R-001202		
Rear reflector	1	/	red	/		DBM K-LITE	or	KM-202	IA E9-02 1268		
Side reflecting devices	2	/	amber	/		DBM K-LITE	or	KM-101	IA E9-02 1270		
8.2.	Diagra lighting	im showing the g and light-sig	e location of nalling devic	the es	:	Refer to dr	awii	ng No. HRTK122	-14		
8.3.	Hazaro	d warning lam	ps (where fit	ted)	:	n.a.					
8.4.	Additional requirements relating to special vehicles				:	n.a.					
8.5.	Brief description of the electrical and/or electronic components used in the lighting system and in the light-signalling system				:	n.a.					
9.	EQUIF	MENT									
9.1.	Coupli	ng devices (w	here applica	ble)							
9.1.1.	Туре (	Type (hook/ring/other) <sup>(1)</sup>				n.a.					
9.1.2.	Photograph and/or drawings showing the position and the construction of the coupling devices				:	n.a.					
9.2.	Arrang contro	ement and ide	entification ond indicators	f							
9.2.1.	Photographs and/or drawings of the arrangement of the symbols, controls, tell-tales and indicators				:	: Refer to drawing No. HRTK122-15					
9.3.	Statuto	ory inscriptions	S								
9.3.1.	drawings of the statu chassis num	tory ber	:	Refer to dr	awii	ng No. HRTK122	-16				
9.3.2.	Photog showin inscrip dimens	graphs and/or ng the official p tion (with state sions)	drawings part of the ement of		:	Refer to dr HRTK122-	awir 17( <i>1</i>	ng No. I), HRTK122-17(	2)		
9.3.3.	Photog chassi dimens	graphs and/or s number (with sions)	drawings of h statement	the of	:	Refer to dr HRTK122-	awii 27(1	ng No. I), HRTK122-27(	2)		
9.4.	Device unauth	e(s) to protect norised use	against								
9.4.1.	Туре с	of device(s)			:	Type 2					
9.4.2.	Summ used	ary description	n of device(s	;)	:	Steering lo Refer to dr	ock, awii	ng No. HRTK122	-18		
9.5.	Audibl	e warning dev	ice(s)						the second se		

11 02-Sep-09

9.5.1.	Summary description of device(s) used and their purpose	:	Electro magnetic actuated diaphragm
9.5.2.	Make(s)	:	CHANGJIE
9.5.3.	Type(s)	:	CHANGJIE DL-60
9.5.4.	Type-approval mark	:	e9*93/30*93/30*1026*00
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. HRTK122-19
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. HRTK122-19
9.6.	Location of rear registration plate (indicate variants where necessary; drawings may be used as appropriate)	:	Refer to drawing No. HRTK122-20
9.6.1.	Inclination of plane in relation to the vertical	:	25º facing upward



Information document: 2002 /24-HRTK122-00 Application date: June 2, 2009

#### 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	:	QY 149
1.1.2.	Component type-approval mark	:	L E7 81R-000507
1.1.3.	Variant	:	n.a.
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. HRTK122-21
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. HRTK122-22
1.2.	Stand		
1.2.1.	Type (central and/or side)	:	central and <del>/or</del> side <sup>(1)</sup>
1.2.2.	Drawing showing the location of the stand(s) in relation to the structure of the vehicle	:	Refer to drawing No. HRTK122-23
1.3.	Attachments for motorcycle sidecars (where applicable)		
1.3.1.	Photographs and/or drawings showing the location and the construction	:	n.a.
1.4.	Hand-hold for a passenger		
1.4.1.	Type (strap and/or handle)	:	strap and/or handle <sup>(1)</sup>
1.4.2.	Photographs and/or drawings showing the location	:	Refer to drawing No. HRTK122-24
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	:	n.a.
1.6	Design and position of the label referred to in Directive 97/24/EC, Chapter 7	:	Refer to drawing No. HRTK122-25



Information document:2002/24- HRTK122-00 Application date: June 2,2009

#### To whom it may concern,

For the vehicle type: HRTK122

#### 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 5000 W and operating voltage is 60V. Modification or disconnection of the device or its wiring system do not have the effect of increasing the motocycle's maximum design speed by more than 10 %.

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

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

Fuliping



Mr.Fu Liping/Chief director

SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO., LTD.



101#, Qianming Eastrd , Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China EC CERTIFICATE OF CONFORMITY

The undersigned:								
	Mr. Fu Liping							
Hereby 0.1.	y certifies that the following vehicle: Make:	XIAOFEILU						
0.2.	Туре:	HRTK122						
	Variant:	Variant 1:Lithium battery						
	Version:	n.a.						
0.2. 1	Commercial name(s) (where appropriate):	TIANKE						
0.4. 0.4. 1 0.5.	Vehicle category: Vehicle category according to Directive 97/24/EC,Chapter 7 (if applicable): Name and address of the manufacturer:	L3e B SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO., LTD. No.101,Qianming Eastrd ,Fengjing Industrial Zone Jingshan District. Shanghai Province						
0.6.	Location of the statutory plate:	P.R. China R, X:1100, Y:200,Z:280						
0.7.	Location of the vehicle identification number on the chassis:	C, X:300, Y:5, Z:450						

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

- EC type-approval number: e11\*2002/24\*XXXX\*00

-dated: MMMM DD, 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.

Shanghai Province, P.R.China (place) fuliping

(signature)

MMMM DD, YYYY

(date)

Director (position)



101#, Qianming Eastrd , Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China Additional information Number of axles: 2 2 and wheels: 1. 3. Wheel base: 1440 mm 6.1 Length: 1980 mm 7.1 Width: 670 mm Height: 1190 8. mm Mass of the vehicle (with bodywork) in running order: 132 12.1. kg Unladen mass of the vehicle: 132 12.2. kg Technically permissible maximum laden mass: 282 14.1. kg 14.2 Distribution of this mass among the axles: 110 2. 172 1. ka kg Technically permissible mass on each axle: 14.3. 110 2. 172 1 kg. Kg 17. Maximum mass of trailer: (braked): ---(unbraked):---Kg kg Maximum vertical load at the coupling point for a trailer: ---19.1. Kg 20. Engine manufacturer: Luqiao Aluminium Co., Ltd. 21. Engine type as marked on the engine: 60V50080 21.2. Engine number: 60V500800904280006 22. Working principle: Electric 23. Number and arrangement of cylinders: --cm<sup>3</sup> 24. Cylinder capacity: ---25. Fuel: ---26. Maximum net power or maximum continuous rated power as applicable: min<sup>-1</sup> KW at 5 Ratio: maximum net power or maximum continuous 26.1. 0.038 (KW/kg) rated power/mass of the vehicle in running order: 28. Gearbox (type): --29. Gear ratios: 32. Tyre size designation: Axle 2: 130/60-13 Axle 1: 130/60-13 37. Body: yes/no Number and configuration of doors : not applicable 41. 42.1. Number and position of seats: 2 r1:1C r2:1C 43.1. Approval mark of coupling device, if fitted: not applicable Maximum speed: 80 km/h 44. 45. Sound level : 97/24/EC chapter 9, with amending of 2006/27/EC min<sup>-1</sup> Stationary: --dB(A) at engine speed: ---Drive-by: --dB(A) 46. Exhaust emissions: 97/24/EC chapter 5, with amending of 2006/120/EC CO : ---Type I test: g/km HC: --g/km HC+ NO<sub>X</sub> : NO<sub>x:</sub> ---g/km g/km Type II test: for mopeds: CO : --HC: --g/min g/min for motorcycles and tricycles: CO : ---% vol Visible air pollution caused by an engine with compression ignition: --m<sup>-1</sup> corrected value of absorption coefficient : ---47. Fiscal power or national code number (s) : Czech Republic: Denmark Belgium : Bulgaria Germany: Estonia: Greece : Spain: France: Ireland: Italy: Cyprus: Luxembourg: Hungary: Latvia: Lithuania: Malta: Netherlands: Austria: Poland: Portugal: Romania: Slovenia: Slovakia: United kingdom : Finland: Sweden:

50. Remarks : ---

51. Exemptions : ---

101#, Qianming Eastrd , Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China

## Statement Concerning Authority Of Signature On COC Paper

### We, SHANGHAI HUARI ENTERPRISE DEVELOPMENT

CO.,LTD. declare that the undersigned, Mr. Fu Liping, the General Manager of our company, will be the authorized persons to sign the COC paper of the moped.

Type: HRTK122 Specification of signature of COC:

Fuliping



Mr.Fu Liping

SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO., LTD.

Date: June 2, 2009



101#,Qianming Eastrd , Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China EC CERTIFICATE OF CONFORMITY

The ur	ndersigned: Mr. Fu Li	ping
Hereby 0.1.	y certifies that the following vehicle: Make:	XIAOFEILU
0.2.	Туре:	HRTK122
	Variant:	Variant 2:Silicon battery
	Version:	n.a.
0.2. 1	Commercial name(s) (where appropriate):	TIANKE
0.4.	Vehicle category:	L3e
0.4. 1	Vehicle category according to Directive 97/24/EC,Chapter 7 (if applicable):	В
0.5.	Name and address of the manufacturer:	SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO., LTD. No.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China
0.6.	Location of the statutory plate:	R, X:1100, Y:200,Z:280
	Vehicle identification number:	LXDTXZW0 97000001
0.7.	Location of the vehicle identification number on the chassis:	C, X:300, Y:5, Z:450

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

- EC type-approval number: e11\*2002/24\*XXXX\*00

-dated: MMMM DD, 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.

Shanghai Province, P.R.China	
(place)	
Fuliping	

(signature)

MMMM DD, YYYY

(date)

Director

(position)



101#, Qianming Eastrd , Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China Additional information Number of axles: 2 2 and wheels: 1. 3. Wheel base: 1440 mm 6.1 Length: 1980 mm 7.1 Width: 670 mm Height: 1190 8. mm Mass of the vehicle (with bodywork) in running order: 172 12.1. kg Unladen mass of the vehicle: 172 12.2. kg Technically permissible maximum laden mass: 322 14.1. kg 14.2 Distribution of this mass among the axles: 2. 194 1. 128 ka kg Technically permissible mass on each axle: 14.3. 128 2. 194 1 kg. Kg 17. Maximum mass of trailer: (braked): ---(unbraked):---Kg kg Maximum vertical load at the coupling point for a trailer: ---19.1. Kg 20. Engine manufacturer: Luqiao Aluminium Co., Ltd. 21. Engine type as marked on the engine: 60V50080 21.2. Engine number: 60V500800904280006 22. Working principle: Electric 23. Number and arrangement of cylinders: --cm<sup>3</sup> 24. Cylinder capacity: ---25. Fuel: ---26. Maximum net power or maximum continuous rated power as applicable: min<sup>-1</sup> KW at 5 Ratio: maximum net power or maximum continuous 26.1. 0.029 (KW/kg) rated power/mass of the vehicle in running order: 28. Gearbox (type): --29. Gear ratios: 32. Tyre size designation: Axle 2: 130/60-13 Axle 1: 130/60-13 37. Body: yes/no Number and configuration of doors : not applicable 41. 42.1. Number and position of seats: 2 r1:1C r2:1C 43.1. Approval mark of coupling device, if fitted: not applicable Maximum speed: 80 km/h 44. 45. Sound level : 97/24/EC chapter 9, with amending of 2006/27/EC min<sup>-1</sup> Stationary: --dB(A) at engine speed: ---Drive-by: --dB(A) 46. Exhaust emissions: 97/24/EC chapter 5, with amending of 2006/120/EC CO : ---Type I test: g/km HC: --g/km HC+ NO<sub>X</sub> : NO<sub>x:</sub> ---g/km g/km Type II test: for mopeds: CO : -a/min g/min HC: --for motorcycles and tricycles: CO : ---% vol Visible air pollution caused by an engine with compression ignition: --m<sup>-1</sup> corrected value of absorption coefficient : ---47. Fiscal power or national code number (s) : Denmark Belgium : Bulgaria Czech Republic: Estonia: Greece : Spain: Germany: France: Ireland: Italy: Cyprus: Latvia: Lithuania: Luxemboura: Hungary: Malta: Netherlands: Austria: Poland: Portugal: Romania: Slovenia: Slovakia: Sweden: United kingdom : Finland:

50. Remarks : ---

51. Exemptions : ---

101#, Qianming Eastrd , Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China

## Statement Concerning Authority Of Signature On COC Paper

### We, SHANGHAI HUARI ENTERPRISE DEVELOPMENT

CO.,LTD. declare that the undersigned, Mr. Fu Liping, the General Manager of our company, will be the authorized persons to sign the COC paper of the moped.

Type: HRTK122 Specification of signature of COC:

Fuliping



Mr.Fu Liping

SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO., LTD.

Date: June 2, 2009



Information document:2002 /24- HRTK122-00 Application date: June 2, 2009



Poproval AU







Information document:2002 /24- HRTK122-00 Application date: June 2, 2009



proval AU



Information document:2002 /24- HRTK122-00 Application date: June 2, 2009



- -

proval A

Information document:2002 /24- HRTK122-00 Application date: June 2, 2009



proval A



Information document:2002 /24- HRTK122-00 Application date: June 2, 2009



Proval A


Information document:2002 /24- HRTK122-00 Application date: June 2, 2009



oproval AU



Information document:2002 /24- HRTK122-00 Application date: June 2, 2009



Poproval Aut

Information document:2002 /24- HRTK122-00 Application date: June 2, 2009



Toproval Autho









Information document:2002 /24- HRTK122-00 Application date: June 2, 2009



Poroval Aut

Information document:2002 /24- HRTK122-00 Application date: June 2, 2009



proval Aut



Information document:2002 /24- HRTK122-00 Application date: June 2, 2009



Poproval Aut



Information document:2002 /24- HRTK122-00 Application date: June 2, 2009



Poproval Auti

Information document:2002 /24- HRTK122-00 Application date: June 2, 2009



- -

oproval Auti







Information document:2002 /24- HRTK122-00 Application date: June 2, 2009



Poproval Au

Information document:2002 /24- HRTK122-00 Application date: June 2, 2009



Poproval Auth





#### Whole Vehicle Type Approval 2 and 3 wheeled **TEST REPORT:** vehicles and Quadricycles

03-045

Report/Job Number: CSK206080

Page: 1 of 3

TEST DETAILS	
Subject	EC Whole Vehicle
EC Directive	2002/24/EC – 2005/30/EC
ECE Regulation	N/A
Location of Test	No. 2-1, Longcang Dadao, Yuhua Economic Development
	Zone, Nanjing, P.R.China
Date of Test	30 June 2009
VCA Representative	Hongda. Zhao
Manufacturer's Representative	Xiaoyu.Zhang
Reason for Test	New approval

MANUFACTURER DETAILS	
Manufacturer's Name	SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO, LTD
Manufacturer's Address	N0.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China
Model Type & description	HRTK122
Category	L3e(electric)

CONCLUSION The above mentioned vehicle was tested in accordance with EC Directive 2002/24EC as amended and was found to comply in all respects 趙泻达 Signature: Name: Hongda. Zhao

Position: Test Engineer

Date: 30 June 2009

LIST OF ANNEXES			
ANNEX	No of PAGES	SUBJECT	
1			
2			
3			
4			





# Whole Vehicle Type Approval 2 and 3 wheeled vehicles and Quadricycles

Paragraph	Para	meter	Complies
	VERSION/VARIANT SELECTION RATIONALE: See below The electric motorcycle have two vanraints about battery.		
Test report number	Subject	Applicable to this vehicle category and configuration?	Complie s
N/A	Maximum torque and maximum net power of the engine	N/A	N/A
CSK206080	Anti-tampering	Y	Conf.
N/A	Fuel tank	N/A	N/A
	Maximum design speed	As manufacturer declared	
CSK206080	Masses and dimensions	Y	Conf.
N/A	Coupling devices	N/A	N/A
N/A	Anti air pollution measures	N/A	N/A
CSK206080	Tyres	Y	Conf.
CSK206080	Braking system	Y	Conf.
CSK206080	Lighting installation	Y	Conf.
CSK206080	Audible warning	Y	Conf.
CSK206080	Rear registration plate space	Y	Conf.
CSK206079 0891*00	Electromagnetic compatibility	Y	Conf.
N/A	Sound levels	N/A	N/A
CSK206080	Rear view mirrors	Y	Conf.
CSK206080	External projections	Y	Conf.
CSK206080	Stands	Y	Conf.
CSK206080	Anti theft	Y	Conf.
N/A	Windows wipers & washer	N/A	N/A 02-Sep-0



	vehicles and Quad	ricycles	
Paragraph	Para	meter	Complies
CSK206080	Passenger hand holds	Y	Conf.
N1/A		N1/A	N1/A
N/A	Seat belt anchorages	N/A	N/A
CSK206080	Speedometer	Y	Conf.
CSK206080	Identification of controls	Y	Conf.
CSK206080	Statutory plates	Y	Conf.

### Whole Vehicle Type Approval 2 and 3 wheeled







### **TEST REPORT:**

### : <u>Anti Tampering for 2 wheel mopeds and</u> <u>motorcycles</u>

03-044 rev1

Report/Job Number: CSK206080

Page: 1 of 5

EWVTA ITEM 2 TR02

Proval P

TEST DETAILS	
Subject	Anti Tampering for 2 wheel mopeds and motorcycles
EEC Directive	97/24/EC ch 7 – 2006/27/EC(Annex IV)
ECE Regulation	N/A
Location of Test	No. 2-1, Longcang Dadao, Yuhua Economic Development
	Zone, Nanjing, P.R.China
Date of Test	22 June 2009
VCA Representative	Hongda. Zhao
Manufacturer's Representative	Xiaoyu.Zhang
Reason for Test	New approval

MANUFACTURER DETAILS	
Manufacturer's Name	SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO,.LTD
Manufacturer's Address	N0.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China
Model Type & description	HRTK122
Category	L3e(electric)

CONCLUSION	The above mentioned vehicle was tested in accordance with EC Directive 97/24/EC ch 7 as amended by 2006/27/EC (Annex IV)and was found to comply in all respects
	Signature: Name: Hongda. Zhao Position: Test Engineer Date: 22 June 2009

LIST OF ANNEXES		
ANNEX	No of PAGES	SUBJECT
1		
2		
3		
4		cia
	<u>.</u>	



Paragraph		Parameter		Complies
TEST SPEC Note: This n cylinder/pis	IFICATION/WORST notor is electric moton combination, ca	CASE RATIONALE: See be torcycle, so no Cylinder h arburettor, intake pipe, exl	elow ead, camshaft, haust., etc.	
1	Risk assessment	completed and stored in job	o folder	
2	Facilities and test	equipments are appropriate	e	Conf.
3	Calibration certific <b>Note: only check</b>	cates checked and valid, rec king, no need any test fac	corded below ility	Conf.
Equ	uipment	Serial No.	Calibratio	n data
Арр 1	Manufacturers Inform	mation document according	to Annex V	Conf.
1.3	Vehicle category	y for anti tampering:		
	B = upto 125cc & up C = upto 25 kW upto D = other than A,B,	oto 11kW 0 0.16 kW/kg (power/mass i or C	n running order)	Conf.
2.1	Interchangeability of than:	parts does not cause increa	ase of more	
	5km/h maximum spe	eed (Category A)		N/A
	10% maximum powe	er (Category B)		Conf.
	Parts covered			N/A
	2 stroke engines: Cy intake pipe, exhaust	/linder/piston combination, c	arburettor,	
	4 stroke engines: Cy combination, carbur	/linder head, camshaft, cylin ettor, intake pipe, exhaust.	der/piston	
2.2	Declaration that mod increase:	difications to fuel feed and ig	nition do	N/A
	Moped maximum sp Motorcycle maximur Maximum speed and category	eed by more than 5 km/h n power by more than 10% d power must still comply wit	th vehicle	<u>iii</u>



Paragraph	Parameter	Complies
2.3	Category B Motorcycles Note: This motor is electric motorcycle, so no Cylinder head, camshaft, cylinder/piston combination, carburettor, intake pipe, exhaust., etc.	
2.3.1	<ul> <li>Unremovable sleeve in intake fitted (60HRC &lt;4mm thick) and</li> <li>Intake attached with tamperproof fixing and</li> <li>Intake marked with B</li> </ul>	
2.3.2	<ul> <li>Intake restrictor fitted and location marked on outside (&lt;4mm thick or 5mm if rubber) and</li> <li>Intake attached with tamperproof fixing and</li> <li>Intake marked with B</li> </ul>	
2.3.3	<ul> <li>Restriction is in the cylinder head and</li> <li>Cylinder head marked with B</li> </ul>	
2.3.5	Diameter of restriction shown on drawing and the manufacturer confirms that restrictor is the critical part	-
3	Additional requirements for category A and B vehicles Note: This motor is electric motorcycle, so no Cylinder head, camshaft, cylinder/piston combination, carburettor, intake pipe, exhaust., etc.	
	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	
3.2	Cylinder – crankcase gasket when mounted < 0.5mm (2 strokes)	
3.3	2 strokes: Piston at TDC must not cover inlet port	
3.4	2 strokes: Rotating the piston by 180 <sup>0</sup> must not increase power	
3.5	No artificial restriction in exhaust system	VA





Paragraph	Parame	eter	Complies
3.6	Effective length of exhaust is not determined by removable parts		
3.7	Throttle control or twist grip stops not fitted? (Forbidden).		
3.8	Electric/electronic speed restrictor fit (If yes manufacturer must show its m not result in a speed increase of > 1		
	Spark cut or inhibit systems? (Forbidden if they result in HC emiss consumption)	ions or increase in fuel	
	Ignition advance device does not can when disconnected	use a difference of >10%	
3.9	Reed valves fitted with tamperproof l	oolts	
3.10	<ul> <li>Markings on parts</li> <li>Parts marked in a visible and durable way (labels are OK if they are destroyed by removal).</li> </ul>		
	Marking is at least 2.5mm letters/numbers		Conf.
	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
	Electric engine cylinder head:		N/A
	Electric engine type: Exhaust pipe: (if separate from silencer)	60V50080	Conf.
			N/A
	Transmission: (output gear number of teeth) Transmission:		N/A
			N/A
	Electrical or electronic devices for the engine: Controller marking :	HR6080	Conf.
	Restricted section:		N/ACA
			02-Sep-



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







### <u>TEST REPORT:</u> <u>Masses and Dimensions of two or three wheel motor</u> <u>vehicles</u>

03-016

Report/Job Number: CSK206080

Page: 1 of 5

TEST DETAILS	
Subject	Masses and Dimensions of two or three wheel motor vehicles
EC Directive	93/93/EEC-2004/86/EC
ECE Regulation	N/A
Location of Test	No. 2-1, Longcang Dadao, Yuhua Economic Development
	Zone, Nanjing, P.R.China
Date of Test	23 June 2009
VCA Representative	Hongda. Zhao
Manufacturer's Representative	Xiaoyu.Zhang
Reason for Test	New approval

MANUFACTURER DETAILS	
Manufacturer's Name	SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO, LTD
Manufacturer's Address	N0.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China
Model Type & description	HRTK122
Category	L3e(electric)

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: Hongda. Zhao Position: Test Engineer Date: 23 June 2009

LIST OF ANNEXES					
ANNEX	No of PAGES	SUBJECT			
1					
2					
3					
4					

MCWVTA ITEM 26 TR\*\* (TST REF 109)

roval F

Paragraph

Parameter

Complies

### TEST SPECIFICATION/WORST CASE RATIONALE: See below The motorcycle have two variants about battery.

- 1 Risk assessment completed and stored in job folder
- 2 Facilities and test equipments are appropriate **Conf.**
- 3 Calibration certificates checked and valid, recorded below

Equipment	
Maker: Shanghai yousheng	
Type: TC S-300	
Series No.: FW-01, FW-02	
Next calibration time: 13 July 2010	

Manufacturer's documentation complete

Conf.

Conf.

#### VERIFICATION OF MASSES

Variant 1: Lithium battery

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	58		100		110
As tested	58		100		
Declared REAR AXLE	74		107		172
As tested	74		107		
Declared COMBINED As tested	132		207	75	282
	132		207		



Paragraph

Parameter

Complies

Conf.

#### Variant 2: Silicon battery

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	75		114		128
As tested	75		114		
Declared REAR AXLE	97		133		194
As tested	97		133		
Declared COMBINED	172		247	75	322
As tested	172		247		

### Note: the electrical motorcycle no fuel tank etc, so the unladen mass equal to running order mass.

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

FRONT AXLE 0%	(Less than 5%)	Conf.
REAR AXLE <b>0</b> %	(Less than 5%)	Conf.
COMBINATION 0%		Conf.
Percentage error betw the vehicle in running	veen the declared and tested masses for order, together with the rider {column (c)}:	
FRONT AXLE <b>0</b> %	(Less than 5%)	Conf.
REAR AXLE <b>0</b> %	(Less than 5%)	Conf.
COMBINATION 0%		Conf.

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



Paragraph	Parameter	Complies
	Masses of the vehicle in running order, together with the rider {column (c)} correspond to those declared by the manufacturer	Conf.
	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	Conf.
	The sum of the technically permissible maximum masses of the axles is at least equal to the technically permissible mass of the vehicle	Conf.
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
	Three-wheel motor vehicles:	N/A
3.2.2.1	The combined mass in column (a) is equal to or less than:	
	270 kg (mopeds)	
	1000 kg (tricycles**)	
3.2.3.1	The combined mass in column (d) is equal to or less than:	
3.2.3.3.1 3.2.3.3.2	300 kg (mopeds)	
	1500 kg (tricycles used for transport of goods)	
	300 kg (tricycles used for transport of persons)	
	Four-wheel motor vehicles:	N/A
3.2.2.2	The combined mass in column (a) is equal to or less than:	
	350 kg (light quadricycles)	
	400 kg (quadricycles other than light used for transport of persons)	VA
		02-Sep-0



Paragraph	Parameter	Complies
		•
	550 kg (quadricycles** other than light used for transport of goods)	
3.2.3.2 3.2.3.4.1	The combined mass in column (d) is equal to or less than:	
3.2.3.4.2	200 kg (light quadricycles)	
	1000 kg (quadricycles other than light used for transport of goods)	
	200 kg (quadricycles other than light used for transport of persons)	

### **VERIFICATION OF DIMENSIONS**

DIMENSIONS (mm)	Length	Width	Height
Declared	1980	670	1190
Measured	1980	670	1190

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







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

03-026

Report/Job Number: CSK206080

Page: 1 of 3

TEST DETAILS	
Subject	FITTING OF TYRES TO TWO OR THREE WHEEL MOTOR VEHICLES
EC Directive	97/24/EC CHAPTER 1-2006/27/EC
ECE Regulation	N/A
Location of Test	No. 2-1, Longcang Dadao, Yuhua Economic Development
	Zone, Nanjing, P.R.China
Date of Test	22 June 2009
VCA Representative	Hongda. Zhao
Manufacturer's Representative	Xiaoyu.Zhang
Reason for Test	New approval

MANUFACTURER DETAILS	
Manufacturer's Name	SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO, LTD
Manufacturer's Address	N0.101, Qianming Eastrd, Fengjing Industrial Zone, Jingshan
	District, Shanghai Province, P.R. China
Model Type & description	HRTK122
Category	L3e(electric)

CONCLUSION	The above mentioned vehicle was tested in accordance with EC Directive 97/24/EC CHAPTER 1 as last amended by 2006/27/EC and was found to comply in all respects			
	Signature: Name: Hongda. Zhao Position: Test Engineer Date: 22 June 2009			

LIST OF ANNEXES				
ANNEX	No of PAGES	SUBJECT		
1				
2				
3				
4				

M/CWVTA ITEM 29 (TST RE

roval



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

Paragraph	Parameter	Complies	
TEST SPECIFI	CATION/WORST CASE RATIONALE: Two variants		
1	Risk assessment completed and stored in job folder		
2	Facilities and test equipments are appropriate	Conf.	
3	Calibration certificates checked and valid, recorded below Note: only checking, no need any test facility	Conf.	

Equipment	Serial No.	Calibration data	

Manufacturer's documentation complete

Conf.

MAXIMUM AXLE WEIGHT:

FRONT: **128**kg;

REAR: 194kg

MAXIMUM SPEED: 80km/h

Details of tyres fitted to vehicle:

	Maker	Size	LCI	Load	Speed	Speed	Approval
				kg	Rating	km/h	No:
Front	CHENG SHIN	130/60-13	53	206	J	100	E4-75R-0002525
Axle							
Rear	CHENG SHIN	130/60-13	53	206	J	100	E4-75R-0002525
Axle							
Spare	N/A						

Annex III REQUIREMENTS FOR VEHICLES WITH REGARD TO THE FITTING OF THEIR TYRES:

1.1 General

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: <del>30, 54, 64 or</del> 75 as referred to in Article 4 of this Directive

Conf.



1.2 Tyre fitment


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

Paragraph	Parameter		Complies
1.2.1	All of the tyres fitted to a vehicle must have the same speed categories symbol (Annex II 1.1.5)	Conf.	
1.2.2	All of the tyres fitted to one axle must be of the same type (see Annex II, section 1.1)	Conf.	
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	Conf.	
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:		







03-032 rev1

### Report/Job Number: CSK206080

Page: 1 of 10

TEST DETAILS	
Subject	Braking of two or three wheel motor vehicles
EC Directive	93/14/EEC – 2006/27/EC
ECE Regulation	78.02
Location of Test	No. 2-1, Longcang Dadao, Yuhua Economic Development
	Zone, Nanjing, P.R.China
Date of Test	23 June 2009
VCA Representative	Hongda. Zhao
Manufacturer's Representative	Xiaoyu.Zhang
Reason for Test	New approval

MANUFACTURER DETAILS	
Manufacturer's Name	SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO,.LTD
Manufacturer's Address	N0.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China
Model Type & description	HRTK122
Category	L3e(electric)

CONCLUSION	The above mentioned vehicle was tested in accordance with EC Directive 93/14/EEC as amended by 2006/27/EC and ECE Regulation 78.02 and was found to comply in all respects				
	Signature: Name: Hongda. Zhao Position: Test Engineer Date: 23. June 2009				

LIST OF ANNEXES								
ANNEX	No of PAGES	SUBJECT						
1	1	Test and check photo						
2								
3								
4								





Paragraph	Parameter	Complies

TEST SPECIFICATION/WORST CASE RATIONALE: See below The vehicles HRTK122, HRTK122-1, HRBJ-183 and HRBJ-183-1are produced by SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO., LTD. They have the same braking system, so according the speed and masses, VCA choose the HRTK122 to conduct the test, the test covered other vehicles type: HRTK122-1, HRBJ-183 and HRBJ-183-1.

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

Equipment	Serial No.	Calibration data
Speed, distance, MFDD	009530	16 January 2009
measurement:		
VBOX IISX Type:VB2SX		
Lever effort measurement:	0902020191	6 February 2009
PKH1.0/HT2.0	0902020194	
Wet brake equipment:	Self made	
Weigh equipment:		
Make: Yousheng Type: TC S-300	FW-01, FW-02	13 July 2009

#### **TEST SPECIFICATION:**

ENGINE: GEARBOX: CATEGORY	<u>VEHICLE :</u> Electric motor N/A L3e			
- SIZE/MAKE/TYPE - PRESSURE (bar)	<u>FRONT AXLE TYRES:</u> 130/60-13/CHENG SHIN/C-6104 2.25			

246

- PRESSURE (bar)

- ROLLING RADIUS (mm)
- TREAD DEPTH (mm)

- ROLLING RADIUS (mm)

- TREAD DEPTH (mm)

- SIZE/MAKE/TYPE

- PRESSURE (bar)

New tyre **REAR AXLE TYRES:** 130/60-13/CHENG SHIN/C-6104 2.25 246 New tyre

#### **BRAKE SYSTEM:**

FRONT AXLE (Disc/drum & dia, number/axle, piston sizes,

master cyl dia, lever ratios, hand or foot)

220mm ventilated disc right hand lever control. Lever ratio:5.333. Two pistons and piston diameter 20mm.

Conf.

Conf.



oroval A

## TEST REPORT: Braking of two or three wheel motor vehicles

Paragraph		Parameter	Complies
- FRO (Disc/d) master - REA - (Hand/f ratios) F IN S - ANN VALV - ARS	DNT BRAKE MATERIAL REAR AXLE rum & dia, number/axle, piston sizes, cyl dia, lever ratios, hand or foot) AR BRAKE MATERIAL PARK BRAKE foot, axle, brake type, dia, lever RONT/REAR NDEPENDENT OR PLIT SYSTEM Y BRAKE DISTRIBUTION /E?	(Asbestos Free) 180mm ventilated disc left hand lever com ratio:5.333. two pistons and piston diamet (Asbestos Free) N/A Independent N/A	trol. Lever er 20mm.
	TEST SPECIFICATION/	WORST CASE RATIONALE:	
	Manufacturer's documer	ntation complete	Conf.
	GENERAL CHECKS	(STATICS)	
	Vehicle is as specified	in documentation	Conf.
2	Systems correctly mou with locking devices wh	inted, made of suitable materials and fitted nere necessary	Conf.
3.1.1.2	Brake linings asbestos (Declared on drawings or confirme	free d by material manufacturer)	Conf.
5.1.1.3 2.2.1	Two independent braki L2e, L3e, L4e, L6e cat	ing devices with independent controls(L1e, egory)	Conf.
	OR		
2.2.3.2	a service braking devic secondary braking dev	e which operates on all the wheels and a ice (L2e, L6e, L7e)	N/A
	Brief details: <b>Hand bra</b> on front and rear. (i.e. foot operated serv on page 2)	king device hydraulically operated disc ice brake acting on all wheels – see spec	
2.2.2	Brake acting on sideca	r wheel (L4e) if required	NA
	-		02-Sep



Paragraph	Parameter	Complies
2.2.4.1	Foot controlled service brake acting on all wheels, and a secondary braking device (L5e,L6e,L7e)	N/A
	Brief details (i.e. foot operated service brake acting on all wheels – see spec on page 2)	
2.1.2.1	Front and rear braking possible with both hands on the steering control	Conf.
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 wheels	Conf.
2.2.5	Parts amply dimensioned and readily accessible	Conf.
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)	Conf.
2.2.7	Brakes operate freely	Conf.
2.1.2.1	Brakes graduable	Conf.
2.2.7.3	Brake components do not contact anything other than intended parts	Conf.





Front line pressure/cable force\* bar/daN

## TEST REPORT: Braking of two or three wheel motor vehicles

Parag	raph	nph Parameter							Complies		
									н <i>а</i>		
LINE PRESSURE RELATIVE TO CONTROL EFFORT N/A, Control force measured directly							directly				
(if nydrau	lic pressure is m	easured	for dyn	amic te	sting, pi	ressure	valves a	are fitted c	pr brake bo	posted syst	ems)
	Control Effort										
	(daN)										

## LINE PRESSURE RELATIVE TO CONTROL EFFORT N/A, Control force measured directly (if hydraulic pressure is measured for dynamic testing, pressure valves are fitted or brake boosted systems)

	00.00.00	 	 			
Control Effort (daN)						
Rear line pressure/cable force* bar/daN						

#### **DYNAMIC TESTING**

	Mass (kg)		
Load Condition	Front Axle(s)	Rear Axle(s)	GVW
Laden <sup>++</sup>	128	194	322
Unladen*	114	133	247

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

<sup>++</sup> If unladen test mass is close to laden GVW testing may only be needed in one condition. The laden requirements must be meet.

#### UNLADEN TESTS

Brake system and Load Condition	l	Nom Speed km/h	Recd Speed km/h	Recd Dist m	Distance corrected for speed m	Recd MFDD m/sec <sup>2</sup>	Recd line pressure or control effort bar/daN
Front	U/L	60	60.3	55.95	55.39	3.6	16.3
(Or Service)							the second se
Rear	U/L	60	59.95	59.58	55.67	4.4	17.4
		•	•	1		1	02-Sep-09

oproval AV



Г

## TEST REPORT: Braking of two or three wheel motor vehicles

Paragraph	Parameter						Complies	
		-		-				
(Or								
Secondary)								
LIMITS	U/L	60			61.38	2.5		
FRONT							20.0	
LIMITS	U/L	60			61.38	2.5		
REAR								
Connected stops (in gear)	30% Vmax	24	23.9	5.71		3.79	F: <b>11.5</b> R: <b>7.7</b>	
Both Brakes Together	55% Vmax	44	44	17.03		5.54	F: <b>12.7</b> R: <b>8.7</b>	
(Record max performance and stability, no distance or decal limits).	80% Vmax upto 160	64	64.7	22.02		4.60	F: <b>13.4</b> R: <b>7.4</b>	

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

Comment stability during connect stops: **connected stop show good Conf. stability**.

SPI	SPECIAL TYPE `O' WET TEST - L1e, L2e, L3e AND L4e Exposed disc brakes						
	Brake system and Load condition		Nom Speed km/h	Recd Speed km/h		Deceleration m/s <sup>2</sup>	Recd line pressure or control effort bar/daN
D	Front	U/L	60	59.93	MFDD	2.46	13.5
R Y					0.5 to 1.0 sec window	1.66	
R	Rear	U/L	60	60.6	MFDD	2.57	14.4
E F					0.5 to 1.0 sec window	2.85	
W	Front	_	60	59.93	MFDD	2.75	11.1
E T		U/L			0.5 to 1.0 sec window	1.63	
	Rear	U/L	60	59.6	MFDD	2.8	12
					0.5 to 1.0 sec window	3.13	sia



Paragraph	Parameter		Complies
	Mean deceleration wet test at least 60% of dry reference (in $0.5 - 1.0$ second window)	Front: <b>98%</b>	Conf.
		Rear: <b>110%</b>	Conf.
	Deceleration during wet test never more than 120% of drv reference	Front: <b>112%</b>	Conf.
		Rear: <b>109%</b>	Conf.

#### LADEN TESTS

PARKING BRAKE GRADIENT TEST							
Ve	hicle GVW on <sup>2</sup>	18 % hill					
Gradient used %	Facing	Control Force	Limit	Complies			
	UP						
	DOWN						

#### LADEN TESTS

Brake system and Load Condition	I	Nom Speed km/h	Recd Speed km/h	Recd Dist m	Distance corrected for speed m	Recd MFDD m/sec <sup>2</sup>	Recd line pressure or control effort bar/daN
Front	L	60	59.3	35.44	36.28	4.5	15.4
(Or Service)							
Rear	L	60	59.8	50.59	50.93	4.45	17.0
(Or Secondary)							
LIMITS	L	60			37.3	4.4	
FRONT							20.0
LIMITS	L	60			54	2.9	
REAR							

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





Paragraph		Parameter						
TYPEITEST	· cc		FEREN	CE TES	T (LADEN) L	314 15 1	7	
(Type O result c	an be i	used, or a	a lower ef	fort cold re	eference to avoi	id wheel lock	on hot stop if per	formance 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 <sup>2</sup>	Recd line pressure or control effort bar/daN	
Front	L	60	59.3	35.44	36.28	4.5	15.4	
Rear		60	59.8	50.59	50.93	4.45	17.0	
	ΤY	PE I FA		ST				
	FR	ONT B	RAKE					
	Sp Nu	eed V 5 mber of	5 <b>6</b> km/h f applica	ations: 1	Interval E 0 Control e Front <b>11</b> . of 3.0)	Distance 10 effort for rep . <b>4</b> daN (Fo	000 m peated braking orce to give MFD	j: <b>Conf.</b> D
	Tin tes	ne elap: it <b>60</b> seo	sed betv cs	ween las	t fade applic	ation and h	not Type `O'	Conf.
	RE	AR BR	AKE					
	Sp Nu	eed V 5 mber of	56 km/h f applica	ations: 1	Interval E 0 Control e Rear <b>12.</b> of 3.0)	Distance 10 effort for rep <b>4</b> daN (Fo	000 m peated braking prce to give MFDI	j: <b>Conf.</b>
	Tin tes	ne elap: st <b>60</b> seo	sed bet <sup>,</sup> cs	ween las	t fade applic	ation and h	not Type `O'	Conf.
		Nom Speed km/h	Recd Spee km/h	d Recd Dist m	Distance corrected for speed m	Recd AV Decel m/sec <sup>2</sup>	Recd line pressure or control effort bar/daN	
HOT Type `O'	F	60	60	.8 39.	7 38.7	3.53	12.4	
	R	60	60	.5 39.	9 39.2	4.24	14.3	
Limit: 60% of cold	F	60			64.6	2.7	15.4	





Paragraph	Parameter							
roforonco								
relefence	Б	60			00	0.07	47.0	
	R				89	2.67	17.0	

Conditions during dynamic testing:

Wind speed **0.9**m/s Ambient temperature **30** °C

Brakes were not binding or rubbing at ambient temperature **Conf.** 

Subjective assessment of the handling and stability during braking, and the progressive action of the controls etc: **Work in good conditions** 







Paragraph

Parameter

Complies

Annex 1. Test and check photos





Front brake



Rear brake





03-015

Report/Job Number: CSK206080

Page: 1 of 7

TEST DETAILS	
Subject	Installation of lights and light signalling devices on two and three wheel motor vehicles
EC Directive	93/92/EEC and 2000/73/EC
ECE Regulation	N/A
Location of Test	No. 2-1, Longcang Dadao, Yuhua Economic Development
	Zone, Nanjing, P.R.China
Date of Test	22 June 2009
VCA Representative	Hongda. Zhao
Manufacturer's Representative	Xiaoyu.Zhang
Reason for Test	New approval

MANUFACTURER DETAILS	
Manufacturer's Name	SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO, LTD
Manufacturer's Address	N0.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China
Model Type & description	HRTK122
Category	L3e(electric)

CONCLUSION	The above mentioned vehicle was tested in accordance with EC Directive 93/92/EEC as last amended by 2000/73/EC and was found to comply in all respects
	Signature: Name: Hongda. Zhao Position: Test Engineer Date: 22 June 2009

LIST OF ANNEXES				
ANNEX	No of PAGES	SUBJECT		
1	2	Check sheet for lighting installation		
2	1	Component approval mark table		
3	1	Vehicle photos		
4				

MCWVTA ITEM 32 TR\*\* (TST REF 107)

Proval P



Paragraph			Complies	
TEST SPECIFI	ICATION/WORST (	CASE RATIONALE: Two variants	j	
1	Risk assessmen	t completed and stored in job folde	ər	
2	Facilities and test equipments are appropriate Conf.			
3	Calibration certificates checked and valid, recorded below Conf.			Conf.
Equipment		Serial No.	Calibration	data

Manufacturer's documentation complete	Conf.
Vehicle and lamps are as specified in documentation	Conf.
All lamps and reflectors securely mounted	Conf.
Not likely to become obscured or misaligned	Conf.
Headlamp can be easily adjusted	Conf.
All pairs of lamps are symmetrically mounted	Conf.
All pairs of lamps appear to be the same colour and brightness	Conf.
All pairs of lamps appear to be the same colour and brightness	
No red light visible to the front	Conf.
No white light visible to the rear	Conf.
SPECIFICATIONS OF INDIVIDUAL LAMPS	
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	Conf.
Any specific mounting recommendations have been complied with	Conf.
All side reflectors have their reference axis $\pm 3^{\circ}$ perpendicular to the longitudinal medianplane	Conf
	02-Sep-09



Paragraph	Parameter		Complies
	All the requirements of sub paragraphs (6.1) to (6.12) a as appropriate to the motorcycle category as shown bel	re complied with ow:	Conf.
	Main (Driving) beam headlamp(s) .		Conf.
	Dipped (Passing) beam headlamp(s)		Conf.
	Direction indicator lamps		Conf.
	Stop lamp(s)		Conf.
	Front position <del>(side)</del> lamp(s)		Conf.
	Rear position <del>(side)</del> lamp(s)		Conf.
	Front fog lamp(s)		N/A
	Rear fog lamp(s)		N/A
	Hazard warning signal		N/A
	Rear registration plate lamp(s)		Conf.
	Side reflex reflectors, non triangular		Conf.
	Rear reflex reflector(s), non triangular		Conf.
	DIPPED (PASSING) HEADLAMP ALIGNMENT		
	Possible to re-set alignment using normal screws		Conf.
	Vehicle category L3e		



Paragraph

Parameter

#### ANNEX 1 to TST107 Check sheet

Lamp	(1) Presenc e	(2) No	(4.1) Width	(4.2) Height	(4.3) Length	(5) Visibility from edge of light emitting surface	(6) Alignment
6.2 Headlamp Main Beam	Y	2	Y	610- 710	Front	ОК	Forwards
6.1 Headlamp Dip Beam	Y	2	Y	610- 710	Front	ок	Forwards
6.3 Direction Indicators	Front:Y	2	More than 240mm	560- 620	Front	ОК	Forwards
	Rear:Y	2	More than 180mm	600- 660	Rear	ок	Rearwards
6.4 Stop Lamp(s)	Y	2	Y	730- 840	Rear	ок	Rearwards
6.5 Front Position Lamp(s)	Y	1	C/L	860- 910	Front	ОК	Forwards
6.6 Rear Position lamp(s)	Y	2	Y	730- 840	Rear	ОК	Rearwards
6.7 Front fog lamp(s)	N						
6.8 Rear fog lamp(s)	N						
6.9 Hazard warning	N						
6.10 Rear reg lamp(s)	Y	1	C/L	Y	Rear	ок	Rearwards
6.11 Side reflectors	Y	2	Y	360- 420	Side	ок	Sidewards
6.12	Y	1	C/L	620-	Rear	ок	Rearwards
		•					02-Sep-09

page 1

Complies



 Paragraph
 Parameter
 Complies

 Rear reflector
 660
 Image: Complex state

#### ANNEX 1 to TST107 Check sheet

page 2

02-Sep-09

		1			1	1
Lamp	(7)	(8)	(9)	(10)	(11)	12)
Lamp	Grouped with	Comb ined with	Recip inc with	Electric al connec tions	Tell- tale	Other requirements*
6.1 Headlamp Main Beam	1	1	Dipped Beam	Y	Y	≪225000cd
6.2 Headlamp Dip Beam	1	1	Main Beam	Y	1	1
6.3 Direction	F:/	1	1	Y	Y	Flashing frequency: 90±30 times
Indicators	R:/	1	1	Y	Y	Flashing frequency: 90±30 times
6.4 Stop Lamp(s)	1	1	Rear Position lamp	Y	1	1
6.5 Front Position Lamp(s)	1	1	1	Y	Panel Iamp	1
6.6 Rear Position lamp(s)	1	1	Stop Lamp	Y	Panel Iamp	1
6.7 Front fog lamp(s)				· ·		
6.8						
Rear fog lamp(s)						
6.9 Hazard warning						
6.10 Rear reg lamp(s)	1	1	1	Y	1	l cha
6.11	1	1	1	1	1	

Paragraph			Parameter			Complies
Side reflectors						
6.12	1	1	1	1	1	1
Rear reflector						

ANNEX II Component approval mark details

Main beam head lamp	E11-113R-000067
Dip beam head lamp	E11-113R-000067
Front position lamp	E11-50R-001198
Front direction indicators	E11-50R-001199
Front fog lamps	N/A
Rear direction indicators	E11-50R-001200
Rear position lamp	E11-50R-001416
Rear stop lamp	E11-50R-001416
Rear fog lamp	N/A
Rear reflector	IA-E9-02.1268
Side reflectors	IA-E9-02.1270
Rear registration plate lamp	E11-50R-001202
Pedal reflectors	N/A







Paragraph

Parameter

Complies

ANNEX 3 Vehicle photos











### <u>TEST REPORT:</u> <u>Audible warning device (installation) for two or three</u> wheel motor vehicles

03-029

Report/Job Number: CSK206080

Page: 1 of 3

Audible warning device (installation) for two or three wheel motor vehicles
93/30/EEC
No. 2-1, Longcang Dadao, Yuhua Economic Development Zone, Nanjing, P.R.China
23 June 2009
Hongda. Zhao
Xiaoyu.Zhang
New approval

MANUFACTURER DETAILS	
Manufacturer's Name	SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO,.LTD
Manufacturer's Address	N0.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China
Model Type & description	HRTK122
Category	L3e(electric)

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: Hongda. Zhao Position: Test Engineer Date: 23. June 2009

LIST OF ANNEXES		
No of PAGES	SUBJECT	
	XES No of PAGES	XES No of PAGES SUBJECT

MCWVTA ITEM 34 TR\*\* (TST REF\_126)



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

Paragraph	Parameter	Complies
TEST SPECIF	ICATION/WORST CASE RATIONALE: Two variants	
1	Risk assessment completed and stored in job folder	
2	Facilities and test equipments are appropriate	Conf.
3	Calibration certificates checked and valid, recorded below	Conf.

Equipment		
Sound level meter:		
Make	AIHUA	AIHUA
Туре	AWA5633	AWA6221B
Serial number	027671	6221B1805
Date of calibration certificate	11 July 2008	9 July 2008
Date last checked		

Manufacturer's documentation con	nplete		Conf.
Details of horns fitted:Make & TypeCHANGJIE/DLModel numberDL-60Voltage rating12VNumber fitted1Approval numbere9*93/30*93/30	60 )*1026*00		
Mounting position of horn as manu	facturers documents		Conf.
Brief description of weather conditi Wind Speed :0.8m/s, Temperature	ons: e :31°C		]
Supply voltage		<b>12.1</b> Volts	Conf.
Microphone located 7m ahead of the	ne test vehicle		Conf.
Ambient noise level Test Results		<b>51.5</b> dB(A)	Conf. Conf.
Microphone height (m)	Sound Level dB(A)		
0.58	88.7		
0.60	85.5		the second se
0.66	86.6		
Test requirement within 0.5 to 1.5n	n height peak of:		02-Sep-09
			TR TROproval Authorit



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

Paragraph

Parameter

Complies

75 to 112 dB(A) Mopeds 80 to 112 dB(A) Motorcycles <7 kW 93 to 112 dB(A) Motorcycles >7 kW







## TEST REPORT:Space for mounting rear registration plate of two or<br/>three wheel vehicles

03-018

Report/Job Number: CSK206080

Page: 1 of 3

TEST DETAILS	
Subject	Space for mounting rear registration plate of two or three wheel vehicles
EC Directive	93/94/EEC and 1999/26/EC
ECE Regulation	N/A
Location of Test	No. 2-1, Longcang Dadao, Yuhua Economic Development
	Zone, Nanjing, P.R.China
Date of Test	22 June 2009
VCA Representative	Hongda. Zhao
Manufacturer's Representative	Xiaoyu.Zhang
Reason for Test	New approval

MANUFACTURER DETAILS	
Manufacturer's Name	SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO, LTD
Manufacturer's Address	N0.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China
Model Type & description	HRTK122
Category	L3e(electric)

CONCLUSION	The above mentioned vehicle was tested in accordance with EC Directive 1999/26/EC and was found to comply in all respects
	Signature: Name: Hongda. Zhao Position: Test Engineer Date: 22 June 2009

ANNEX	No of PAGES	SUBJECT
1		
2		
3		
4		

MCWVTA ITEM 35 TR\*\* (TST REF\_127)



### TEST REPORT: Space for mounting rear registration plate of two or three wheel vehicles

Paragraph		Parameter		Complies
TEST SPECIFI	CATION/WORST (	CASE RATIONALE: Two variants		
1	Risk assessmen	t completed and stored in job folde	er	
2	Facilities and tes	st equipments are appropriate		Conf.
3	Calibration certif	icates checked and valid, recorded	dbelow	Conf.
Equi	pment	Serial No.	Calibratio	n data
	Manufacturer's c	locumentation complete		Conf.
1	Space for mount	ing rear registration plate		Conf.
	Mopeds and light	t quadricycles:		
	100mm wide 175	5mm high		N/A
	OR 145mm wide	e 125mm high		N/A
	Motorcycles 28	Omm wide 210 high		Conf.
2	Rear registration	plate space		
	Located at the re	ar of the vehicle, within the width o	f the vehicle	Conf.
3	Inclination:			
	At right angles to	longitudinal median plane of the ve	ehicle	Conf.
	Vertical inclinatio <b>25</b> degrees UP	n between 30º facing up to 15º faci / <del>/DOWN</del>	ng down	Conf.
4,5	Height (Vehicle a	at kerb mass )		
	Maximum 1.5m	<b>0.58</b> .m		Conf.
	Minimum 0.2m	<b>OR</b> wheel radius if less than 0.2m	<b>0.389</b> m	Conf.
6	Geometric Visibil	ity:		
	30° up from the t	op edge of the plate		Conf. 02-Sep-09
				Toproval Autho



# TEST REPORT: Space for mounting rear registration plate of two or three wheel vehicles

Paragraph	Parameter	Complies
	5° down from the bottom edge of the plate	Conf.
	30º either side	Conf.







#### RADIO INTERFERENCE (ELECTROMAGNETIC COMPATIBILITY) - VEHICLE TEST

Report/Job Number: CSK206079

Page 1 of 10

ELECTROMAGNETIC COMPATIBILITY - VEHICLE TEST
97/24 Chapter 8
N/A
No. 2-1, Longcang Dadao, Yuhua Economic Development
Zone, Nanjing, P.R.China
22 June 2009
Hongda. Zhao
Xiaoyu.Zhang
New approval

MANUFACTURER DETAILS	
Manufacturer's Name	SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO, LTD
Manufacturer's Address	N0.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan
	District, Shanghai Province, P.R. China
Model Type & description	HRBJ-183
Category	L3e(electric)

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: Hongda.zhao Position: Test Engineer Date: 22 June 2009

LIST OF ANNEXES				
ANNEX	No of PAGES	SUBJECT		
1	2	EMC TEST AND CHECK PHOTOGRAPHS		
2	4	NARROWBAND TEST RESULTS		
3	4	BROADBAND TEST RESULTS		
4				





Report/Job Number : CSK206079 , Page 2 of 10

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

Paragraph

Parameter

Complie s

Conf.

Conf.

TEST SPECIFICATION/WORST CASE RATIONALE: See below The vehicles HRBJ-183, HRBJ-183-1, HRTK122, and HRTK122-1 are produced by SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO,.LTD. they have the same electric engine and controller, so according the current ,VCA choose the HRBJ-183 to conduct EMC test, the test covered other vehicles type: HRBJ-183-1, HRTK122, and HRTK122-1.

1	Risk assessment completed and stored in job folder
	There accessifier completed and stored in jeb folder

- 2 Facilities and test equipments are appropriate
- 3 Calibration certificates checked and valid, recorded below

Equipment	Serial No.	Calibration data
Biconical Antenna	15272	28 Mar 2009
JB1 Antenna	A030702	19 Mar 2009
Receiver	101216	19 Mar 2009
Signal Generator	202302/820	13 Mar 2009

	Documentation complete	Conf.
	Vehicle corresponds to that agreed in worst-case meeting	Conf.
&	EMISSIONS	
	Measuring equipment complies with CISPR 16-1(93)	Conf.
	Type and calibration date: Maker: R&S Type: ESPI 3 Series: 101216 Calibration time: 19 Mar 2009	
	TEST LOCATION:	
	O.A.T.S. Is level, clear area free from electromagnetic reflecting surfaces within a circle of minimum radius 30m	N/A
	Measuring equipment within test site but only in permitted region (See Figure 1)	N/A
	Ambient noise at least 10 dB below reference limits Note: Broadband and narrowband tests use the enclosed chamber.	Conf.



Report/Job Number : CSK206079 , Page 3 of 10

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

Paragr	aph	Parameter	Complie s
	ANTENNA		
	Types and calibration Maker: Sunol Scienc Type: JB1 Series: A030702 Calibration time: 19	dates: ces, Inc. Mar 2009	
	Height and distance: OR	3 m and 10 m 1.8 m and 3 m	Conf. N/A
	Antenna's receiving e the vehicle rests	lements no closer than 0.25m to the plane on which	Conf.
	If enclosed test facility 1.0m to any radio abs facility	v is used, antenna's receiving elements no closer than sorbent material or closer than 1.5m to the wall of	Conf.
	No absorbent materia	I between receiving antenna and vehicle	Conf.
	Pre-test sweep suppli to 1000 MHz	ed to show compliance throughout frequency range 30	Conf.
	Test frequencies chose Note: Pre-test swee	sen from pre-test data p meet the 97/24 chapter 8 requirements.	Conf.
V	NARROWBAND TES	T	
	Initial test carried out		Conf.
	Ignition switched on		Conf.
	Electronic systems in	normal operating mode	Conf.
	Comments:		
	Detector used and ba	indwidth	Conf.





#### RADIO INTERFERENCE (ELECTROMAGNETIC COMPATIBILITY) - VEHICLE TEST

Report/Job Number: CSK206079

Page 4 of 10

#### IV 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	Conf.
Speed setting mechanism not influencing electromagnetic radiation	Conf.
Other sources of broadband noise at maximum current drain	Conf.
List: Head light main beam ON , RH side direction indicator ON	
Detector used and bandwidth	Conf.

Quasi Peak and 120KHz





#### RADIO INTERFERENCE (ELECTROMAGNETIC COMPATIBILITY) - VEHICLE TEST

Report/Job Number: CSK206079

Page 5 of 10

IV IMMUNITY

TEST FACILITY DESIGNATION/NO:

20MHz to 300MHz (Biconical Antenna) 300MHz to 1000MHz (Log period Antenna)

CALIBRATION: Date: Biconical Antenna Maker: COM-POWER Type: AB-900 Series: 15272 Next calibration dates: 28 Mar 2010

Log period Antenna Maker: Sunol Sciences, Inc. Type: JB1 Series: A030702 Calibration time: 19 Mar 2009

Signal generator Maker: IFR Type: 2023B Series: 202302/820 Calibration time: 13 Mar 2009

Antenna type(s) and frequency range(s): Note: Test procedure The test frequency step: 1% multiply previous test frequency from 20MHz to 1000MHz; Dwell time: 2 seconds for every frequency point. Antenna polarization -Horizontal and vertical

Antenna height - 1.5m

Antenna elements no closer than 0.25 m to plane on which vehicle rests

and no closer than 1.0 m to any absorber

and no closer than 1.5 m to any wall

No absorbent material between antenna and vehicle

REFERENCE POINT

- as Appendix 1 or 2 -



Conf.

Conf.

Conf.

Conf.



Report/Job Number : CSK206079 , Page 6 of 10

## TEST REPORT: RADIO INTERFERENCE (ELECTROMAGNETIC COMPATIBILITY)

Falameter	Complie s
- distance from antenna -2.0m	
- on vehicle centre line	Conf.
- height 1.0 ± 0.05m <del>or 2.0 ± 0.05m</del> -	Conf.
Extraneous equipment in place during calibration	Conf.
Forward power used to define test field	Conf.
OR another parameter directly related	N/A
Calibration steps $\leq$ 2% of previous frequency	Conf.
Field strength contour minimum 50% of nominal in minimum 80% of calibration steps	Conf.
TEST ARRANGEMENTS	
Vehicle	
- unladen except test equipment	Conf.
- on appropriately loaded dynamometer	N/A
- OR insulated axle stands	Conf.
- headlights on dipped beam	Conf.
- left or right direction indicator flashing	Conf.
<ul> <li>all other systems which affect driver's control on as in normal operation of vehicle</li> </ul>	Conf.
- no connections to test area	Conf.
Note: The stand supports the motor in the stationary position. The test ground is covered by filmy insulated plastic. - reports for other systems attached	N/A
- only non-perturbing monitoring equipment	Conf.
<ul> <li>facing antenna on centre line</li> <li>Note: Because the electrical motor and controller are installed on the rear of motor, VCA rotate the motor 180 degree. Seeing attachment photograph in the Annex 1 in the details.</li> <li>VCA chooses to subject the rear part of the vehicle to radiation, the</li> </ul>	Conf.
	<ul> <li>distance from antenna -2.0m</li> <li>on vehicle centre line</li> <li>height 1.0 ± 0.05m or 2.0 ± 0.05m -</li> <li>Extraneous equipment in place during calibration</li> <li>Forward power used to define test field</li> <li>OR another parameter directly related</li> <li>Calibration steps ≤ 2% of previous frequency</li> <li>Field strength contour minimum 50% of nominal in minimum 80% of calibration steps</li> <li><b>TEST ARRANGEMENTS</b></li> <li>Vehicle</li> <li>unladen except test equipment</li> <li>on appropriately loaded dynamometer</li> <li>OR insulated axle stands</li> <li>headlights on dipped beam</li> <li>left or right direction indicator flashing</li> <li>all other systems which affect driver's control on as in normal operation of vehicle</li> <li>no connections to test area</li> <li>Moze: The stand supports the motor in the stationary position. The test group is covered by filmy insulated plastic.</li> <li>reports for other systems attached</li> <li>only non-perturbing monitoring equipment</li> <li>chaing antenna on centre line</li> <li>Moze: Because the electrical motor and controller are installed on the rear of motor, VCA rotate the motor 180 degree. Seeing attachment photograph in the Annex 1 in the details.</li> </ul>



-

Report/Job Number : CSK206079 , Page 7 of 10

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

Paragrap	h Parameter	Complie
		<u> </u>
	reference point is established as stated in annex $IV$ 5.4. In this case the vehicle will be positioned with its front part facing in the opposite direction to the antenna and as if it had been rotated horizontally through 180 degrees about its central point. The distance between the antenna and the nearest part of the outer surface of the vehicle must remain the same (see annex $IV$ Appendix 3).	
	- OR other (state position)	N/A
	Antenna elements no closer than 0.5m to outer body surface of vehicle	Conf.
	TLS $\geq$ 75% of length of vehicle	N/A
	Antenna and test equipment layout to the same specification as for calibration	Conf.
	Pre-test sweep supplied to show compliance throughout frequency range 20 to 1000 MHz	Conf.
	Test frequencies chosen from pre-test data	Conf.
	Test signal dwell time sufficient (minimum 2 seconds)	Conf.
	Vehicle speed: km/h and gear:	N/A
	<b>Note: Electric motors 75% of maximum operating power</b> Modulated test signal peak value equals unmodulated sine wave peak value whose test limits are defined in paragraph 6.4.2 of Annex I (For Modulation, carrier wave power is reduced by 5.1 dB to conserve peaks)	Conf. Conf.
	Test signal is R.F. sine wave amplitude modulated by a 1 kHz sine wave at a modulation depth of $0.8 \pm 0.04$	Conf.



VEHICLE CERTIFICATION AGENCY Report/Job Number : CSK206079 , Page 8 of 10

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

Paragraph

Parameter

Complie s

VEHICLE IMMUNITY TEST RESULTS Before the immunity test, EMC lab calibrate the Filed Strength 30V/m, the results as below:							
Frequency Suggested (MHz)	Frequency (MHz)	Forward Power		Outpu	Field Strength (V/m)		
		—— <del>Cal.</del> —— <del>(W)</del>	— <del>—Test</del> — <del>(W)</del>	Cal. (dBm)	Test (dBm)		
27	26.69			-0.4	-0.4	30.011	
45	45.678			-6.9	-6.9	30.027	
65	66.008			-0.7	-0.7	29.995	
90	88.968			-4.8	-4.8	30.214	
120	119.916			-0.6	-0.6	30.224	
150	149.261			-2.8	-2.8	29.896	
190	191.418			-0.9	-0.9	29.687	
230	299.532			-1.8	-1.8	29.922	
280	281.706			-0.5	-0.5	30.023	
380	379.697			-6.4	-6.4	30.053	
450	450.422			-4.1	-4.1	30.273	
600	601.09			-7	-7	30.111	
750	748.147			-3.8	-3.8	30.000	
900	903.891			-1.6	-1.6	30.246	

6.4.2.2	No malfunction at 30 V/m or below	Conf.
6.4.2.1	Note: The motorcycle L3e performance don't show any derogation during the immunity test from 20MHz to 1000MHz. Malfunction between 25 and 30 V/m over less than 10% of 20 to 1000 MHz	
	frequency band	Conf.
6.1.4	Tests not performed at chamber resonant frequencies	Conf.
<u> </u>		





Report/Job Number : CSK206079 , Page 9 of 10

## TEST REPORT: RADIO INTERFERENCE (ELECTROMAGNETIC COMPATIBILITY)

Paragraph

Parameter

Complie s

#### ANNEX 1 EMC TEST PHOTOGRAPHS



Narrowband test status



#### Broadband test status





Report/Job Number : CSK206079 , Page 10 of 10

## TEST REPORT: RADIO INTERFERENCE (ELECTROMAGNETIC COMPATIBILITY)

Paragraph

Parameter

Complie s



Immunity test status (20MHz to 300MHz)



Immunity test status (300MH to 1000MHz)



## 美国信科检验认证集团 信亚美科(南京)信息技术有限公司 SIEMIC Nanjing (China) Laboratories

#### **Report Information**



#### Test Data

Frequency (MHz)	Average	Azimuth	Polarity	Height	Factors	Limit (dBuV/m)	Margin (dB)
32.09	8.12	0.00	Н	300.00	-28.01	24.00	-15.88
728.90	14.24	0.00	Н	300.00	-22.91	35.00	-20.76
948.53	15.62	0.00	Н	300.00	-20.24	35.00	-19.38
587.63	12.56	0.00	Н	300.00	-25.38	35.00	-22.44
141.01	3.33	0.00	Н	300.00	-33.07	28.15	-24.81
503.60	11.98	0.00	Н	300.00	-26.14	35.00	-23.02
170.25	4.19	0.00	Н	300.00	-32.53	29.39	-25.20
66.11	-2.40	0.00	Н	300.00	-38.80	24.00	-26.40
97.13	0.24	0.00	Н	300.00	-36.43	25.70	-25.47
371.99	8.38	0.00	Н	300.00	-29.50	34.52	-26.14
293.08	5.67	0.00	Н	300.00	-31.38	32.96	-27.29

No.2-1,Longcang Dadao, Yuhua Economic Development Zone, Nanjing, P.R.China 南京市雨花经济开发区, 龙藏大道 2-1 号 Tel: +86(25)8673 0128 ,+86(25)8673 0129, Fax: +86(25)8673 0127 Email: info@siemic.com.cn URL: www.siemic.com.cn



## 美国信科检验认证集团 SIEMIC Nanjing (China) Laboratories

#### **Report Information**



Test Data							
Frequency (MHz)	Average	Azimuth	Polarity	Height	Factors	Limit (dBuV/m)	Margin (dB)
30.18	9.50	0.00	Н	300.00	-26.78	24.00	-14.50
891.57	14.85	0.00	Н	300.00	-20.99	35.00	-20.15
802.14	14.50	0.00	Н	300.00	-22.23	35.00	-20.50
674.56	13.31	0.00	Н	300.00	-23.70	35.00	-21.69
518.10	12.11	0.00	Н	300.00	-26.01	35.00	-22.89
160.55	4.46	0.00	Н	300.00	-32.52	29.00	-24.53
128.27	1.90	0.00	Н	300.00	-33.86	27.53	-25.63
350.75	7.44	0.00	Н	300.00	-29.87	34.14	-26.69
45.59	-1.40	0.00	Н	300.00	-37.30	24.00	-25.40
173.08	3.95	0.00	Н	300.00	-32.54	29.49	-25.54
226.36	4.67	0.00	Н	300.00	-32.82	31.26	-26.59

No.2-1,Longcang Dadao, Yuhua Economic Development Zone, Nanjing, P.R.China 南京市雨花经济开发区, 龙藏大道 2-1 号 Tel: +86(25)8673 0128 ,+86(25)8673 0129, Fax: +86(25)8673 0127 Email: <u>info@siemic.com.cn</u> URL: <u>www.siemic.com.cn</u>


#### **Report Information**



### Test Data

Frequency (MHz)	Average	Azimuth	Polarity	Height	Factors	Limit (dBuV/m)	Margin (dB)
975.32	15.76	0.00	V	300.00	-19.90	35.00	-19.24
31.39	9.11	0.00	V	300.00	-27.52	24.00	-14.89
155.39	4.48	0.00	V	300.00	-32.52	28.79	-24.30
659.37	13.58	0.00	V	300.00	-24.02	35.00	-21.42
802.93	14.46	0.00	V	300.00	-22.22	35.00	-20.54
517.58	12.09	0.00	V	300.00	-26.01	35.00	-22.91
104.53	0.73	0.00	V	300.00	-35.34	26.18	-25.45
386.94	8.49	0.00	V	300.00	-29.25	34.78	-26.29
70.74	-2.18	0.00	V	300.00	-38.65	24.00	-26.18
292.75	5.79	0.00	V	300.00	-31.40	32.95	-27.16
182.21	3.49	0.00	V	300.00	-32.55	29.83	-26.34



#### **Report Information**



### Test Data

Frequency (MHz)	Average	Azimuth	Polarity	Height	Factors	Limit (dBuV/m)	Margin (dB)
29.98	10.20	0.00	V	300.00	-26.62	24.00	-13.80
661.03	13.60	0.00	V	300.00	-23.99	35.00	-21.40
957.27	15.91	0.00	V	300.00	-20.13	35.00	-19.09
808.55	14.73	0.00	V	300.00	-22.14	35.00	-20.27
517.34	12.00	0.00	V	300.00	-26.01	35.00	-23.00
72.14	-1.97	0.00	V	300.00	-38.70	24.00	-25.97
381.23	8.44	0.00	V	300.00	-29.34	34.68	-26.24
148.91	4.23	0.00	V	300.00	-32.58	28.50	-24.27
125.01	1.72	0.00	V	300.00	-34.06	27.36	-25.64
176.80	3.77	0.00	V	300.00	-32.54	29.63	-25.86
293.84	5.90	0.00	V	300.00	-31.36	32.97	-27.07



# 美国信科检验认证集团 <sup>信亚美科(</sup>南京)信息技术有限公司 SIEMIC Nanjing (China) Laboratories

#### **Report Information**



#### Test Data

Frequency (MHz)	Quasi Peak (dBuV/m)	Azimuth	Polarity	Height	Factors	Limit (dBuV/m)	Margin (dB)
899.96	19.95	0.00	Н	300.00	-20.87	45.00	-25.05
750.02	18.81	0.00	Н	300.00	-22.71	45.00	-26.19
450.06	16.03	0.00	Н	300.00	-27.59	45.00	-28.97
600.01	18.08	0.00	Н	300.00	-25.27	45.00	-26.92
220.01	9.79	0.00	Н	300.00	-32.76	41.07	-31.29
300.09	11.95	0.00	Н	300.00	-31.12	43.11	-31.16
150.02	9.67	0.00	Н	300.00	-32.51	38.56	-28.89
180.05	9.23	0.00	Н	300.00	-32.55	39.76	-30.53
45.03	4.33	0.00	Н	300.00	-37.01	34.00	-29.67
65.00	3.20	0.00	Н	300.00	-38.85	34.00	-30.80
90.02	3.94	0.00	Н	300.00	-38.49	35.20	-31.26



#### **Report Information**



Frequency (MHz)	Quasi Peak (dBuV/m)	Azimuth	Polarity	Height	Factors	Limit (dBuV/m)	Margin (dB)
749.97	18.77	0.00	Н	300.00	-22.71	45.00	-26.23
599.88	18.09	0.00	Н	300.00	-25.27	45.00	-26.91
900.06	19.96	0.00	Н	300.00	-20.87	45.00	-25.04
45.04	4.39	0.00	Н	300.00	-37.01	34.00	-29.61
449.88	16.02	0.00	Н	300.00	-27.59	45.00	-28.98
150.09	9.64	0.00	Н	300.00	-32.51	38.56	-28.92
220.09	9.79	0.00	Н	300.00	-32.76	41.07	-31.29
179.98	9.20	0.00	Н	300.00	-32.55	39.76	-30.56
300.11	11.94	0.00	Н	300.00	-31.12	43.11	-31.17
65.03	3.15	0.00	Н	300.00	-38.85	34.00	-30.85
89.89	3.87	0.00	Н	300.00	-38.49	35.20	-31.33



#### **Report Information**



Test.	Data
-------	------

Frequency (MHz)	Quasi Peak (dBuV/m)	Azimuth	Polarity	Height	Factors	Limit (dBuV/m)	Margin (dB)
900.01	19.93	0.00	V	300.00	-20.87	45.00	-25.07
749.92	18.80	0.00	V	300.00	-22.71	45.00	-26.20
150.03	9.66	0.00	V	300.00	-32.51	38.56	-28.89
599.87	18.10	0.00	V	300.00	-25.27	45.00	-26.90
449.92	16.00	0.00	V	300.00	-27.59	45.00	-29.00
64.95	3.55	0.00	V	300.00	-38.85	34.00	-30.45
44.91	4.62	0.00	V	300.00	-37.01	34.00	-29.38
299.93	11.96	0.00	V	300.00	-31.12	43.11	-31.15
180.12	9.21	0.00	V	300.00	-32.55	39.76	-30.54
220.06	9.64	0.00	V	300.00	-32.76	41.07	-31.44
89.95	3.92	0.00	V	300.00	-38.49	35.20	-31.28



#### **Report Information**



Frequency (MHz)	Quasi Peak (dBuV/m)	Azimuth	Polarity	Height	Factors	Limit (dBuV/m)	Margin (dB)
900.00	19.94	0.00	V	300.00	-20.87	45.00	-25.06
750.10	18.79	0.00	V	300.00	-22.71	45.00	-26.21
149.97	9.61	0.00	V	300.00	-32.51	38.56	-28.94
600.03	18.05	0.00	V	300.00	-25.27	45.00	-26.95
89.92	3.97	0.00	V	300.00	-38.49	35.20	-31.23
45.07	4.54	0.00	V	300.00	-37.01	34.00	-29.46
179.94	9.22	0.00	V	300.00	-32.55	39.76	-30.54
450.04	16.02	0.00	V	300.00	-27.59	45.00	-28.98
65.11	3.39	0.00	V	300.00	-38.85	34.00	-30.61
300.08	11.91	0.00	V	300.00	-31.12	43.11	-31.20
220.04	9.69	0.00	V	300.00	-32.76	41.07	-31.38





# TEST REPORT:

# FITTING OF REAR VIEW MIRRORS TO TWO OR THREE WHEEL MOTOR VEHICLES (UNBODIED)

03-028rev1

Report/Job Number: CSK206080

Page: 1 of 3

TEST DETAILS	
Subject	FITTING OF MIRRORS TO TWO OR THREE WHEEL
	MOTOR VEHICLES (UNBODIED)
EC Directive	97/24/EC CHAPTER 4 (ANNEX III) – 2006/27/EC
ECE Regulation	N/A
Location of Test	No. 2-1, Longcang Dadao, Yuhua Economic Development
	Zone, Nanjing, P.R.China
Date of Test	22 June 2009
VCA Representative	Hongda. Zhao
Manufacturer's Representative	Xiaoyu.Zhang
Reason for Test	New approval

MANUFACTURER DETAILS	
Manufacturer's Name	SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO, LTD
Manufacturer's Address	N0.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China
Model Type & description	HRTK122
Category	L3e(electric)

CONCLUSION	The above mentioned vehicle was tested in accordance with EC Directive 97/24/EC CHAPTER 4 (ANNEX III) as amended by 2006/27/EC and was found to comply in all respects
	Signature: Name: Hongda. Zhao Position: Test Engineer Date: 22 June 2009

ANNEXNo of PAGESSUBJECT11Rear view mirrors installation photo23	LIST OF ANNEXES				
1     1     Rear view mirrors installation photo       2     3	ANNEX	No of PAGES	SUBJECT		
2 2 3 2	1	1	Rear view mirrors installation photo		
3	2				
	3				
4	4				

M/CWVTA ITEM 38 TR\*\* (TST REF 140)



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

Paragraph	Parameter			Complies
1	Risk assessment completed and stored in job folder			
2	Facilities and test equipments are appropriate			Conf.
3	Calibration certificates checked and valid, recorded below			Conf.
Equipment		Serial No.	Calibratior	n data

#### TEST SPECIFICATION/WORST CASE RATIONALE: Two variants

See definition of unbodied in 2006/27/EC – explain	Conf.
specification below.	
Motorcycle	
Manufacturer's documentation complete	Conf.

Mirrors Fitted to the vehicle:

	Approval No:	Nominal R mm	Measured R
			mm
Exterior Left	E7 81R-000507	1200	/
Exterior Right	E7 81R-000507	1200	/

1.1	All mirrors remain stable under normal operating conditions	Conf.
1.2	Centre of reflecting surface $\geq$ 280 mm from median longitudinal plane of the vehicle:	Conf.
	Exterior Left: <b>350</b> mm Exterior Right: <b>350</b> mm	Conf. Conf.
1.3	Normal driving position gives clear view of the road to side(s) and to the rear of the vehicle:	Conf.
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°	
1.7	Exterior mirrors do not project beyond bodywork more than necessary for field of vision	Conf.
1.8	If lower edge of exterior mirror is below 2m (vehicle fully laden) mirror projects less than 0.20m beyond overall vehicle width:	Conf.
	Actual projection left <b>0.1</b> m	





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

Paragraph	Parameter	
	Actual projection rightm	
2.3	If single exterior mirror is fitted it is on the appropriate side	N/A
3	Adjustment:	
3.1	Mirrors are adjustable from the driving position	Conf.
3.1	Mirrors are adjustable from the driving position	Conf.



ANNEX 1 Rear view mirrors installation photo







# TEST REPORT:

# <u>EXTERNAL PROJECTIONS, UNBODIED MOTOR</u> VEHICLES

03-011rev1

Report/Job Number: CSK206080

Page: 1 of 6

TEST DETAILS	
Subject	EXTERNAL PROJECTIONS, UNBODIED MOTOR VEHICLES
EC Directive	97/24/EC CHAPTER 3-2006/27/EC
ECE Regulation	N/A
Location of Test	No. 2-1, Longcang Dadao, Yuhua Economic Development
	Zone, Nanjing, P.R.China
Date of Test	23 June 2009
VCA Representative	Hongda. Zhao
Manufacturer's Representative	Xiaoyu.Zhang
Reason for Test	New approval

MANUFACTURER DETAILS	
Manufacturer's Name	SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO, LTD
Manufacturer's Address	N0.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China
Model Type & description	HRTK122
Category	L3e(electric)

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: Hongda. Zhao Position: Test Engineer Date: 23 June 2009

LIST OF ANNEXES				
ANNEX	No of PAGES	SUBJECT		
1	2	Check photos		
2				
3				
4				





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

#### Report/Job Number: CSK206080, Page: 2/6 **TST 139** DIRECTIVE Y/N/N/A PARAGRAPH OR READING

#### TEST SPECIFICATION/WORST CASE RATIONALE: Two variants

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

Equipment	Serial No.	Calibration data

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

TEST SPECIFICATION/ WORST CASE RATIONALE:

	Manufacturers documentation is complete	
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	Conf.
4.1	Vehicle in straight line, vertical position as level floor with 50 percentile rider	Conf.
	Steering free to move	Conf.
5	Criteria	

**GROUP 1 PARTS - GRAZING** 5.2.1



Conf.

Conf.



# TEST REPORT:

## DIRECTIVE 97/24/EC CHAPTER 3 ANNEX I EXTERIOR PROJECTIONS UNBODIED MOTOR VEHICLES Report/Job Number: CSK206080 , Page: 3/6

TST 139 DIRECTIVE PARAGRAPH

Y/N/N/A OR READING

Left Side:			
Part	Plates	Stems	Soft Rubber or
	Corners R>3mm	Ø>10mm	Plastic <60
	edges R>0.5mm	edge R>2mm	share
Body panel	Y		
Foot support	Y		
Front and rear direction indicator lamps	Y		
Stand	Y		

#### 5.2.1 GROUP 1 PARTS - GRAZING

**Right Side:** 

Part	Plates	Stems	Soft Rubber or
	Corners R>3mm	Ø>10mm	Plastic <60
	edges R>0.5mm	edge R>2mm	share
Body panel	Y		
Front and rear direction indicator lamps	Y		
Foot support	Y		

## 5.2.2 GROUP 2 PARTS: COLLISION

#### Left Side:N/A

Part	Plates Edges and Corners R>2mm	Stems Length <½Ø if Ø <20mm if Ø >20mm edges R>2mm	Soft Rubber or Plastic <60 share	
			02	-Sep-09
			LIK ROD	roval Authorit



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

TST 139	Report/Job Number: CSK206080 , Page: 4/6
DIRECTIVE	Y/N/N/A
PARAGRAPH	OR
	READING

#### 5.2.2 GROUP 2 PARTS: COLLISION

Right Side: I	N/A			
Part		Plates Edges and Corners R>2mm	Stems Length <½Ø if Ø <20mm if Ø >20mm edges R>2mm	Soft Rubber or Plastic <60 share
6	Specific	requirements:		
6.1	Upper e R≥2mm OR Coverec <60 sha	dge of fairing windscreen eith I with edge protection of soft re	ner: rubber or plastic	Conf.
6.2	Outer er	nds of Clutch and brake lever	s spherical	
	Radius	≥ 7mm		Conf.
	Outer ea	dges <u>&gt;</u> 2mmR		Conf.
6.3	Front m	udguard leading edge R≥ 2m	m	Conf.
6.4	Filler ca <b>Electric</b>	p located in tank upper surfact motor has no fuel tank.	ce	N/A
	Projectio	$on \leq 15mm$		N/A
	Connect	tion with underlying surface s	mooth and spherical	N/A
	≤15 mm Give det	projection not met, but alterr tails:	native protective device provide	ed <b>N/A</b>

6.5 Ignition Key:

Folding Type

Flush Fitting

N/A N/A



TCT 120

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

Report/Job Number: CSK206080 , Page: 5/6

101 133	
DIRECTIVE	Y/N/N/A
PARAGRAPH	OR
	READING

#### Protective Cap Note:The key is non-contactable during testing.

Conf.

Test Location: No. 2-1, Longcang Dadao, Yuhua Economic Development Zone, Nanjing, P.R.China

Test Date: 23 June 2009

\* Delete where inapplicable



ANNEX 1 Check photos



Left side





# **TEST REPORT:**

## DIRECTIVE 97/24/EC CHAPTER 3 ANNEX I EXTERIOR PROJECTIONS UNBODIED MOTOR VEHICLES Report/Job Number: CSK206080 , Page: 6/6

TST 139

DIRECTIVE PARAGRAPH Y/N/N/A OR READING



Right side





# TEST REPORT: Stands for two wheel motor vehicles

03-006

Report/Job Number: CSK206080

Page: 1 of 7

TEST DETAILS	
Subject	Stands for two wheel motor vehicles
EC Directive	93/31/EEC and 2000/72/EC
ECE Regulation	N/A
Location of Test	No. 2-1, Longcang Dadao, Yuhua Economic Development
	Zone, Nanjing, P.R.China
Date of Test	23 June 2009
VCA Representative	Hongda. Zhao
Manufacturer's Representative	Xiaoyu.Zhang
Reason for Test	New approval

MANUFACTURER DETAILS	
Manufacturer's Name	SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO, LTD
Manufacturer's Address	N0.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China
Model Type & description	HRTK122
Category	L3e(electric)

CONCLUSION	The above mentioned vehicle was tested in accordance with EC Directive 93/31/EEC and was found to comply in all respects
	Signature: Name: Hongda. Zhao Position: Test Engineer Date: 23 June 2009

LIST OF ANNEXES				
ANNEX	No of PAGES	SUBJECT		
1	1	Check photo		
2				
3				
4				

MCWVTA ITEM 40 TR\*\* (TST REF 103)



Roproval AV

# **TEST REPORT: Stands for two wheel motor vehicles**

Paragraph		Parameter		Complies
TEST SPECIF variants.	FICATION/WORST C	CASE RATIONALE: Va	ariant 2 tested, it covered	lother
1	Risk assessment o	completed and stored	in job folder	
2	Facilities and test	equipments are appro	priate	Conf.
3	Calibration certifica	ates checked and vali	d, recorded below	Conf.
Equi	pment	Serial No.	Calibration	n data
	Manufacturer's doo	cumentation complete	)	Conf.
	Vehicle correspond	ls to agreed specificat	ion	Conf.
5.2.1	VEHICLE SPECIFI	ICATION		
	Mass of vehicle in r order <sup>(1)</sup>	running <b>172</b> kg		Conf.
	Distribution of that	mass between the axl	es <sup>(1)</sup>	
	Front: 77kg	Rear: S	<b>95</b> kg	Conf.
5.2.2	Tyre size and press	sure <sup>(1)</sup>		
	Front: Size: <b>130/60-13</b>	Type: <b>C-6104</b>	Pressure: <b>225</b> kPa	Conf.
	Rear: Size: <b>130/60-13</b>	Туре: <b>С-6104</b>	Pressure: <b>225</b> kPa	Conf.
5.2.3	Transmission in neutral, or park for automatics			Conf.
5.2.4	Parking brake applied, if fitted			N/A
5.2.5	Number of steering positions	lock 1 left		Conf.
	NOTE: If the steering is able to be locked when it is turned to			02-Sep-0



# **TEST REPORT: Stands for two wheel motor vehicles**

Paragraph	Parameter	Complies
	either the left or the right the tests must be carried out in both positions	
	GENERAL	
2.1	If the vehicle has two wheels is it fitted with a stand(s) that is/are* capable of keeping the vehicle steady when stationary without external assistance	
	If the vehicle has twin wheels it need not be fitted with a stand but must comply, with parking platform test requirements, (paragraph 6.2) with the handbrake applied	N/A
2.2	Type of stand(s)* fitted: Prop / Centre / Both*	Conf.
	Drawing or Part number(s)* HRTK122-23	
2.3	All stands retract rearwards to attain the retracted or travelling position	Conf.
	GENERAL SPECIFICATIONS	
3.1	Prop Stands:	
3.1.1.1	Prop stand provides lateral stability on a horizontal supporting surface	Conf.
3.1.1.3	Prop stand must be able to retract automatically:	
3.1.1.3.1	When the vehicle is returned to the vertical from the parked position	N/A
	<u>OR</u> .	
3.1.1.3.2	When the vehicle moves forward, as a result of a deliberate action by the driver. NB: following the first contact of the prop stand with the ground was removed at corrigendum – no longer allowed, interlock or self-retracting stand required.	N/A
3.1.2	The requirements set out in section 3.1.1.3 above do not apply if the vehicle is designed in such away that it cannot be propelled by its engine when the prop stand is extended	Conf.

Toproval Authorit



# **TEST REPORT: Stands for two wheel motor vehicles**

Paragraph	Parameter	Complies
	Functional check performed to verify performance Remark: The engine can't be started when the prop stand is extended.	Conf.
3.1.1.4	Prop stand must be designed and constructed in such a way that it <b>does not</b> close automatically if the angle of lean is altered unexpectedly:	
3.1.1.4.1	Once in the extended or parking position	Conf.
3.1.1.4.2	When the vehicle is leaned in order to bring the outer extremity of the prop stand into contact with the ground	Conf.
3.1.1.4.3	With the vehicle being left unattended in its parking position	Conf.
3.2	Centre Stands:	
3.2.1 3.2.1.1.1	Centre Stand supports vehicle with front <del>/rear/neither</del> *wheel in contact with the supporting surface and confers stability on a horizontal supporting surface	Conf.
3.2.1.2 3.2.1.2.1	Centre Stand must be able to fold backwards automatically into the retracted position when the vehicle moves forward in such a way as to raise the centre stand from the supporting surface	N/A
3.2.2	The requirements set out in 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	Conf.
	Functional check performed to verify performance Remark: The engine can be started when the centre stand is extended, but the rear wheel not contact with supporting surface, so vehicle cannot be propelled by its engine.	Conf.
	OTHER REQUIREMENTS	N/A
4.1	Vehicle fitted with a tell-tale	
	To which stand is it fitted: Prop / Centre / Both*	
	Is it clearly visible to the rider from the riding position	
	When the ignition is switched on does it light up and remain lit until the stand is retracted	02-Sep-0

Roproval Au



# **TEST REPORT: Stands for two wheel motor vehicles**

Paragraph	Parameter	Complies
4.2	Each stand has two independent devices for retention in the retracted or travelling position:	Conf.
	Prop: dual spring	Conf.
	Centre: dual spring	Conf.
	Description of these devices: 2 independent springs, details to see HRTK122-23	
	If any stand is retained by a single device does it meet the durability requirements laid down in paragraph 4.2 of the Directive	N/A
	TEST EQUIPMENT AND TEST PAD	
5.3.1	Is the test pad used for tests to check the <b>stability on a</b> horizontal supporting surface as specified in paragraph 6.1:	Conf.
	Flat and horizontal with a hard surface that is dry and free from grains of sand	Conf.
5.4.2 5.4.3	Does the parking platform used for tests to check the <b>stability on an inclined surface</b> , as specified in paragraph 6.2:	Conf.
5.4.4	<ul> <li>have a rigid, flat rectangular surface which is able to support the vehicle without perceptible flexing</li> </ul>	Conf.
	<ul><li>(ii) possess sufficient anti-skid properties to prevent the vehicle from sliding</li></ul>	Conf.
	(iii) allow the correct transverse tilt and longitudinal tilt angles to be assumed during the tests described in paragraph 6.2.2 of the Directive	Conf.
	TEST PROCEDURES	
6.1	Stability on a horizontal supporting surface requirements for Prop stands	Conf.
6.1.1 6.1.2	Prop stand does not retract automatically when the vehicle is moved $3^{\circ}$ towards the vertical from its parked position	Conf.
6.2	Stability on an inclined surface, requirements for Prop and	Conf. 02-Sep-09



# TEST REPORT: Stands for two wheel motor vehicles

Paragraph	Parameter	Complies
	Centre Stands and twin-wheel vehicles	
6.3.1	Place vehicle on platform in parking position with the chosen stand	Conf.
6.2.3	Before performing the test on a centre stand verify the normal support condition when parked, i.e. centre stand and front wheel. If the vehicle will normally rest on the centre stand and either the front or rear wheels then the following tests must be performed with the vehicle resting on the centre stand and rear wheel.	Conf.
6.2.2	Move platform to its minimum transverse tilt (tt) and then to its minimum longitudinal tilt (It) in accordance with the following	Conf.

table:

Tilt	Prop Stand		Centre Stand	
	Moped	Motorcycle	Moped	Motorcycle
Left tt	5% (2.9 <sup>°</sup> )	6% (3.5 <sup>°</sup> )	6% (3.5 <sup>°</sup> )	8% (4.6 <sup>°</sup> )
Right tt	5% (2.9 <sup>°</sup> )	6% (3.5 <sup>°</sup> )	6% (3.5 <sup>°</sup> )	8% (4.6 <sup>°</sup> )
Downstream It	5% (2.9 <sup>°</sup> )	6% (3.5 <sup>°</sup> )	6% (3.5 <sup>°</sup> )	8% (4.6 <sup>°</sup> )
Upstream It	6% (3.5 <sup>°</sup> )	8% (4.6 <sup>°</sup> )	12% (6.9 <sup>°</sup> )	14% (8.0 <sup>°</sup> )

equivalent angles shown in brackets.

#### RESULTS

TILT	PROP STAND	CENTRE	TWIN
		STAND	WHEEL
LEFT tt	4°	5.5°	N/A
RIGHT tt	4°	5.5°	N/A
UP STREAM It	5.5°	9°	N/A
DOWN STREAM It	4°	5.5°	N/A

Does vehicle remain stable under all conditions

Conf.



6.2.4 3.1.1.1 3.1.1.2 3.2.1.1.2 3.2.1.1.3 2.1



# TEST REPORT: Stands for two wheel motor vehicles

Paragraph

Parameter

Complies

<sup>(1)</sup> More than one vehicle may be required for the separate tests if stand(s) are to be used on a range of models



ANNEX 1 Check photo







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

## **Report/Job Number: CSK206080**

Page: 1 of 4

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	No. 2-1, Longcang Dadao, Yuhua Economic Development
	Zone, Nanjing, P.R.China
Date of Test	22 June 2009
VCA Representative	Hongda. Zhao
Manufacturer's Representative	Xiaoyu.Zhang
Reason for Test	New approval

MANUFACTURER DETAILS	
Manufacturer's Name	SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO,.LTD
Manufacturer's Address	N0.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China
Model Type & description	HRTK122
Category	L3e(electric)

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: Hongda. Zhao Position: Test Engineer Date: 22 June 2009

LIST OF ANNEXES			
ANNEX	No of PAGES	SUBJECT	
1			
2			
3			
4			



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

Paragraph	Parameter	Complies
	TEST SPECIFICATION/ WORST CASE RATIONALE: Two variants	
	Manufacturer's documentation complete	Conf.
	GENERAL CHECKS	
2.4	Type Number of device (1, 2, 3 or 4) <b>2</b>	
	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	Conf.
3	GENERAL SPECIFICATIONS	
3.2.1	Vehicle cannot be steered or driven/moved forward in a straight line with device engaged	Conf.
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	Conf.
	No intermediate position of key will risk bolt engagement (with or without key inserted)	Conf.
3.3	Only one key used	Conf.
3.4	Special tools required for dismantling	Conf.



#### VEHICLE CERTIFICATION AGENCY

# **<u>TEST REPORT</u>**: <u>Protective devices intended to prevent</u> <u>unauthorised use of two or three wheel motor vehicles</u>

Paragraph	Parameter	Complies
	Cannot be easily rendered ineffective or destroyed	Conf.
3.5	Original equipment	
	Lock securely assembled in protective device	Conf.
3.6	Manufacturer certifies 1000 different combinations	Conf.
3.7	Key and lock not visibly coded	Conf.
3.8	Nearest key in combination does not turn lock cylinder with a torque of less than 0.245 mdaN .	Conf.
3.8.1	Design of tumblers meets requirements	Conf.
3.8.2 3.9	Risk of accidental locking excluded	Conf.
3.10	Device withstood torque application of 20 mdaN in both directions (excluding Type 4)	Conf.
	No damage sustained to steering mechanism likely to compromise safety (excluding Type 4)	Conf.
3.11	Steering can only be locked at a minimum angle of 20° to the left and <i>for right of straight ahead position (excluding Type 4)</i> :	Conf.
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)	Conf.
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)	Conf.
4.3	Impossible to prevent device functioning when set (Type 3 only)	N/A



#### VEHICLE CERTIFICATION AGENCY

# <u>TEST REPORT</u>: <u>Protective devices intended to prevent</u> <u>unauthorised use of two or three wheel motor vehicles</u>

Paragraph	Parameter	Complies
4.4	Device subjected to wear test for 2500 cycles (Type 3 only)	N/A
	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 wrench	U.S.A 5060657608 Calibrated valid to 10 July 2010
	Type: NB-5(1~5N·m) 0610375 Calibrated valid to 10 July 2010





Passenger hand holds on two wheel motor vehicles

# **TEST REPORT:**

#### 03-007

Report/Job Number: CSK206080

Page: 1 of 3

TEST DETAILS	
Subject	Passenger hand holds on two wheel motor vehicles
EC Directive	93/32/EEC and 1999/24/EC
ECE Regulation	N/A
Location of Test	No. 2-1, Longcang Dadao, Yuhua Economic Development
	Zone, Nanjing, P.R.China
Date of Test	22 June 2009
VCA Representative	Hongda. Zhao
Manufacturer's Representative	Xiaoyu.Zhang
Reason for Test	New approval

MANUFACTURER DETAILS	
Manufacturer's Name	SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO, LTD
Manufacturer's Address	N0.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China
Model Type & description	HRTK122
Category	L3e(electric)

CONCLUSION	The above mentioned vehicle was tested in accordance with EC Directive 93/32 as last amended by 1999/24/EC and was found to comply in all respects
	Signature: Name: Hongda. Zhao Position: Test Engineer Date: 22. June 2009

LIST OF ANNEXES			
ANNEX	No of PAGES	SUBJECT	
1			
2			
3			
4			





# TEST REPORT: Passenger hand holds on two wheel motor vehicles

Paragraph	Parameter			Complies	
TEST SPECIFI	CATION/WORST	CASE RATIONALE: Two	variants	5	
1	Risk assessmen	t completed and stored i	n job folde	er	
2	Facilities and tes	st equipments are approp	oriate		Conf.
3	Calibration certif	icates checked and valid	l, recordeo	d below	Conf.
Equi	pment	Serial No.		Calibration	data
	Manufacturer's c	documentation complete			Conf.
	Method of load application: Lift it with crane				
	Vehicle loaded with no more than 75 kg for rider and 75 kg for passenger in normal seating positions <b>N/A</b>			N/A	
	Rear wheel of vehicle anchored to floor to prevent lifting, if required <b>Con</b>			Conf.	
	Test for Strap N/A			N/A	
	Strap positioned	for ease of use			
	Grip position syr vehicle	netrical to the median lor	ngitudiana	al plane of the	
	Load applied ver	rtically to the centre of the	e surface	of the Strap	
	Magnitude of loa	ad applied (>2000N)	N	I	
	Area over which load applied mm <sup>2</sup>				
	Pressure (force/area) N/mm <sup>2</sup>				
	Maximum press	ure less than 2 MPa or 2	N/mm <sup>2</sup>		

#### **Test for dual Hand Grips**

Grips positioned one each side of vehicle in symetrical manner

Load applied vertically to the centre of the surface of each hand grip





\_\_\_\_\_

# TEST REPORT: Passenger hand holds on two wheel motor vehicles

Paragraph	Parameter		Complies
	Magnitude of load applied (>1000N per grip) Nearside Offside	1025N 1025N	
	Area over which load applied Nearside Offside	1800mm² 1800mm²	
	Pressure (force/area) Nearside Offside	<b>0.57</b> N/mm <sup>2</sup> <b>0.57</b> N/mm <sup>2</sup>	
	Maximum pressure less than 1 MPa or 1N/mm <sup>2</sup>	per grip	Conf.
	Strap/hand grips and its attachements capable required load without snapping	of withstanding	Conf.







03-001

Report/Job Number: CSK206080

Page: 1 of 6

TEST DETAILS	
Subject	SPEEDOMETER
EC Directive	2000/7/EC
ECE Regulation	R39.00
Location of Test	No. 2-1, Longcang Dadao, Yuhua Economic Development
	Zone, Nanjing, P.R.China
Date of Test	23 June 2009
VCA Representative	Hongda. Zhao
Manufacturer's Representative	Xiaoyu.Zhang
Reason for Test	New approval

MANUFACTURER DETAILS	
Manufacturer's Name	SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO,.LTD
Manufacturer's Address	N0.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan District, Shanghai Province, P.R. China
Model Type & description	HRTK122
Category	L3e(electric)

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: Hongda. Zhao Position: Test Engineer Date: 23 June 2009

LIST OF ANNEXES				
ANNEX	No of PAGES	SUBJECT		
1	1	Check photo		
2				
3				
4				



Equipment	Serial No.	Calibration data
VBOX IISX Type:VB2SX	009530	16 January 2009

#### TEST SPECIFICATION:

VEHICLE : ENGINE: GEARBOX: AXLE RATIO:	Motorcycle Electric motor N/A N/A
<i>FRONT AXLE TYRES:</i> - SIZE/MAKE/TYPE - QUOTED PRESSURE - TEST PRESSURE - ROLLING RADIUS - TREAD DEPTH	<b>130/60-13/CHENG SHIN/C-6104 225</b> kPa <b>245</b> kPa <b>246</b> mm <b>As new</b>
<i>REAR AXLE TYRES:</i> - SIZE/MAKE/TYPE - PRESSURE - TEST PRESSURE - ROLLING RADIUS - TREAD DEPTH	<b>130/60-13/CHENG SHIN/C-6104 225</b> kPa <b>245</b> kPa <b>246</b> mm <b>As new</b>

Manufacturer's documentation in order

Conf.



DETAILS OF SPEEDOMETER:

3.2.1 Make: GUIDU

Type: HRTK122

Description: Front wheel makes worm wheel turn to drive worm,soft-axes to meter worm	
Overall speedometer drive ratio:22:12	
Location: in middle of steering handle	
Legible day and night:	Conf.
Range of speed indicated: km/h Scale: Dual mph-km/h Scale: <b>100km/h, 60mph</b>	N/A Conf
Manufacturer's quoted max speed for model range: km/h: <b>80</b> mph: <b>50</b>	Conf. Conf.
Indicated speed range enough to cover quoted maximum speed:	Conf.
Analogue Scale/Digital Display: Analogue Scale	
Indicated max speed does not exceed 200 km/h:	Conf.
Steps for Marked Speed Indication: <b>10 km/h,10mph</b> [Requirement: Marked Speed at intervals not exceeding 20 (km/h and mph)]	Conf.
Indicated max speed exceeds 200 km/h:	N/A
Steps for Marked Speed Indication: [Requirement: Marked Speed at intervals not exceeding 30 (km/h only)]	
Steps for Marked Graduations (Analogue Scales only): <b>5 km/h,10mph</b> [Requirement: marking to be in steps of 1, 2, 5 or 10 (km/h and mph) ]	Conf.
TEST CONDITIONS	
Tyre size and pressures - SEE VEHICLE SPECIFICATION TABLE	
Tyre pressure for test were at Manufacturer's quoted presure plus 0.2	Conf.
Track condition: Flat and Dry	Cont. 02-Sep-
	Worm, sort-axes to interer worm Overall speedometer drive ratio:22:12 Location: in middle of steering handle Legible day and night: Range of speed indicated: km/h Scale: Dual mph-km/h Scale: 100km/h, 60mph Manufacturer's quoted max speed for model range: km/h:80 mph:50 Indicated speed range enough to cover quoted maximum speed: Analogue Scale/Digital Display: Analogue Scale Indicated max speed does not exceed 200 km/h: Steps for Marked Speed Indication: 10 km/h,10mph [Requirement: Marked Speed at intervals not exceeding 20 (km/h and mph)] Indicated max speed exceeds 200 km/h: Steps for Marked Speed Indication: [Requirement: Marked Speed at intervals not exceeding 30 (km/h only)] Steps for Marked Graduations (Analogue Scales only): 5 km/h,10mph [Requirement: marking to be in steps of 1, 2, 5 or 10 (km/h and mph)] TEST CONDITIONS Tyre size and pressures - SEE VEHICLE SPECIFICATION TABLE Tyre pressure for test were at Manufacturer's quoted presure plus 0.2 bar: Track condition: Flat and Dry

Paragraph	Parameter			
4.3.4 (5.2.6)	Speedometer temperature with range 23 $\pm$ 5°C: ambient temp = <b>31</b> °C			
()	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: <b>114</b> kg Rear Axle: <b>133</b> kg			
	Test vehicle masses: Front axle: <b>114</b> kg Rear Axle: <b>133</b> kg			
4.3.2	Load on axle(s) driving speedometer correspond to quoted axle mass(es)	Conf.		



Paragraph

Parameter

Complie s

#### **RESULTS**

Requirement:

# $0 \leq V_1 - V_2 \leq (V_2/10) + 4 \text{ km/h}$

4.4	Test No	Indicated Speed V <sub>1</sub>		True Spe (km/h)	ed	V <sub>1</sub> - V <sub>2</sub>	(V <sub>2</sub> /10 ) + 4 km/h	
(5.3)		(km/h)	East	West	Average V <sub>2</sub>			
	TEST F	RESULTS FO	OR TYRI	E SIZE:				
	Tyre R	olling Radius	: mm	or Tyre	e Revs/km:*			
		40	38	38.9	38.5	1.5	7.85	Conf.
		65	61.4	61.4	61.4	3.6	10.14	
	TEST/0	CALCULATE	D* RES	JLTS FOR	R TYRE SIZ	ZE:		
	Tyre R	olling Radius	: mm	or Tyre	e Revs/km:*			
	TEST/0	CALCULATE	D* RES	JLTS FOF	R TYRE SIZ	ZE:		
	Tyre R	olling Radius	: mm	or Tyre	e Revs/km:*			
	TEST/0	CALCULATE	D* RES	JLTS FOF	R TYRE SIZ	ZE:		
	Tyre R	olling Radius	: mm	or Tyre	e Revs/km:*	,		
	Note: A and r	bove results	valid for	all tyre si	zes with rol	lling radii b	petween mm	





Paragraph	Pa	rameter	Complie
			S
* Dele <sup>t</sup> <sup>1)</sup> Test km/h	te as appropriate speed 120 km/h or 80% of maxir	num speed if maximum is less than 150	
Notes: For gi speed	ven actual road speed measure for an alternative tyre size =	d during the test the revised indicated	
OP	Indicated Speed For Test x	Test Tyre Rolling Rad mm Alternative Tyre Rolling Rad mm	
UK	Indicated Speed For Test x	Alternative Tyre Revs/km Test Tyre Revs/km	
This a transm	assumes that the same speed dission ratios are the same for all t	o drive ratios and (where relevant)	

NB: Maybe tested on rolling road if roll diameter > 400mm for mopeds, > 2000mm for other vehicles.



ANNEX 1 Check photo







# TEST REPORT: IDENTIFICATION OF CONTROLS, TELL-TALES AND INDICATORS FOR TWO OR THREE WHEEL MOTOR VEHICLES

Report/Job Number: CSK206080 , Page 1 of 11

TEST DETAILS	
Subject	IDENTIFICATION OF CONTROLS, TELL-TALES AND
-	INDICATORS FOR TWO OR THREE WHEEL MOTOR
	VEHICLES
EC Directive	93/29/EEC and 2000/74/EC
ECE Regulation	Not Applicable
Location of Test	No. 2-1, Longcang Dadao, Yuhua Economic Development
	Zone, Nanjing, P.R.China
Date of Test	22 June 2009
VCA Representative	Hongda. Zhao
Manufacturer's Representative	Xiaoyu.Zhang
Reason for Test	New approval

MANUFACTURER DETAILS	
Manufacturer's Name	SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO,.LTD
Manufacturer's Address	N0.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan
	District, Shanghai Province, P.R. China
Model Type & description	HRTK122
Category	L3e(electric)

CONCLUSION	The above mentioned vehicle was tested in accordance with EC Directive 93/29/EEC as last amended by 2000/74/EC and was found to comply in all respects
	Signature: Name: Hongda. Zhao Position: Test Engineer Date: 22 June 2009

LIST OF ANNEXES			
ANNEX	No of PAGES	SUBJECT	
1	1	Check photos	
2			
3			
4			

**EWVTA ITEM 33 TR33.000**


Paragraph Parameter Complie S TEST SPECIFICATION/WORST CASE RATIONALE: Two variants Risk assessment completed and stored in job folder 1 2 Facilities and test equipments are appropriate Conf. 3 Calibration certificates checked and valid, recorded below Conf. Note: only checking, no need any test facility Manufacturer's documentation complete Conf. **ANNEX LITEMS:** 

(Where fitted controls tell-tales and indictors must be identified by symbols as defined in Annex I)

#### **FIGURE 1**

#### MAIN BEAM HEADLAMPS

Main-beam headlamps	
ISO 2575 No 4.1	┝
Colour of sell-tale light : blue	
Г Т	
	F
=	L
_ )	Γ
-1/	ŀ
	F
Framed areas may be solid.	
The number of lines can be four.	

YES/NO **Control** Fitted YES Control has correct symbol Υ Symbol meets visibility and clarity requirements Y Symbol on or close to control ON/CLOSE CLOSE Remarks: Tell-tale Fitted YES/NO YES [Requirement: Mandatory] Colour of Tell-tale Υ [Requirement: Blue] Tell-tale has correct symbol Υ Symbol meets visibility and clarity requirements Y Symbol on or close to Tell-tale ON/CLOSE ON Remarks:

### **FIGURE 2**

BLUE

Dipped beam nea	diamps
ISO 2575 No	4.2
Colour of tell-tale lig	bt : green
<b>F</b>	
and the second second	
=	1
10 Mar	9998 - I
- 10 March 194	_
GREEN	

### DIPPED BEAM HEADLAMPS

YES/NO	YES
	Y
	Y
ON/CLOSE	CLOSE
	_
YES/NO	NO
	N/A
	02-Sep-09
	The state
	Yoproval Autho
	YES/NO ON/CLOSE YES/NO



Paragraph	Parameter		Complie s
	Tell-tale has correct symbol		N/A
	Symbol meets visibility and clarity requirements		N/A
	Symbol on or close to Tell-tale	ON/CLOSE	N/A
IGURE 3	DIRECTION INDICATORS		
- 7	Control Fitted	YES/NO	YES
	Control has correct symbol		Y
	Symbol meets visibility and clarity requirements		Y
	Symbol on or close to control		
	Pomarke:		CLOGL
1			
REEN			-
	Toll-tale Fitted		VES
	Paguiromont: Mandatory unloss Audible warning		TES
	fitted		
	Colour of Tell-tale		v
	[Requirement: Green ]		•
	Tell-tale has correct symbol		V
	Symbol meets visibility and clarity requirements		v v
	Symbol on or close to Toll-tale		
	Pomarke:	soparatoly	
	Tell-tale arrows operate together/separately/* for left	Separately	
	and right indicators		
	* Delete as appropriate		
IGURE 4	HAZARD WARNING		N/A
	Control Fitted	YES/NO	1477
	Control has correct symbol		
	Symbol meets visibility and clarity requirements		
	Symbol on or close to control	ON/CLOSE	
	Remarks:		
1			
ED			
	Tell-tale Fitted	YES/NO	
	[Requirement: Mandatory]		
	Colour of Tell-tale		
	[Requirement: Red - See Remarks]		
	Tell-tale has correct symbol - See Remarks		
	Symbol meets visibility and clarity requirements		
	Symbol on or close to Tell-tale	ON/CLOSE	
	Remarks:		cta
	Tell-tale/symbol as Fig 4 used alone* OR		
	Fig 4 used together with both arrows in Fig 3 OR		
	Both arrows in Fig 3 used without Fig 4		102-Sor

Francoval Authorit



Paragraph

Parameter

Complie S

#### \* Delete as appropriate

**FIGURE 5** 

	СНОКЕ		N/A
٦	Control Fitted	YES/NO	
11	Control has correct symbol		
	Symbol meets visibility and clarity requirements		
	Symbol on or close to control	ON/CLOSE	
1 - I	Remarks:		
_			
	Tell-tale Fitted	YES/NO	
	[Requirement: Optional]		
	Colour of Tell-tale		
	[Requirement: Amber]		
	Tell-tale has correct symbol		
	Symbol meets visibility and clarity requirements		
	Symbol on or close to Tell-tale	ON/CLOSE	
	Remarks:		

#### **FIGURE 6**

Г

L

	^		
н	( )	ĸ	N
	v	•	

Control Fitted	YES/NO	YES
Control has correct symbol		Y
Symbol meets visibility and clarity requirements		Y
Symbol on or close to control	ON/CLOSE	CLOSE
Remarks:		

#### **FIGURE 7**

Outline only may also

FUE	11	ΕV	FI
FUE	ᄂᄂ		СL

	FUEL LEVEL		N/A
	Indicator (Gauge) Fitted	YES/NO	
	Gauge has correct symbol		
<b>[</b>	Symbol meets visibility and clarity requirements		
\	Symbol on or close to gauge	ON/CLOSE	
	Remarks:		
he used			
	Tell-tale Fitted	VES/NO	
	[Requirement: Optional]	120/110	
	Colour of Tell-tale		
	[Requirement: Amber]		
	Tell-tale has correct symbol		cip
	Symbol meets visibility and clarity requirements		
	Symbol on or close to Tell-tale	ON/CLOSE	
	Remarks:		02-Sep-09
			Toproval Author





Paragraph

Parameter

Complie s

FIGURE 8	ENGINE COOLANT TEMPERATURE		N/A
	Indicator (Gauge) Fitted	YES/NO	
E	Gauge has correct symbol		
F	Symbol meets visibility and clarity requirements		
$\sim \bullet \sim$	Symbol on or close to gauge	ON/CLOSE	
	Remarks:		
RED			
	Tell-tale Fitted	YES/NO	
	[Requirement: Optional]		
	Colour of Tell-tale		
	[Requirement: Red]		
	Tell-tale has correct symbol		
	Symbol meets visibility and clarity requirements		
	Symbol on or close to Tell-tale	ON/CLOSE	
	Remarks:		

#### **FIGURE 9**

Descriptions

RED

-

#### **BATTERY CHARGING CONDITION**

Indicator (Gauge) Fitted	YES/NO	YES
Gauge has correct symbol		Y
Symbol meets visibility and clarity requirements		Y
Symbol on or close to gauge	ON/CLOSE	ON
Remarks:		
Tell-tale Fitted	YES/NO	NO
[Requirement: Optional]		
Colour of Tell-tale		N/A
[Requirement: Red]		
Tell-tale has correct symbol		N/A
Symbol meets visibility and clarity requirements		N/A
Symbol on or close to Tell-tale	ON/CLOSE	N/A
Remarks:		



Complie



Paragraph

## TEST REPORT: IDENTIFICATION OF CONTROLS, TELL-TALES AND INDICATORS FOR TWO OR THREE

			3
FIGURE 10	ENGINE OIL PRESSURE		N/A
г 🦷	Indicator (Gauge) Fitted	YES/NO	
	Gauge has correct symbol		
DI	Symbol meets visibility and clarity requirements		
	Symbol on or close to gauge	ON/CLOSE	
	Remarks:		
RED			
	Tell-tale Fitted	YES/NO	
	[Requirement: Optional]		
	Colour of Tell-tale		
	[Requirement: Red]		
	Tell-tale has correct symbol		
	Symbol meets visibility and clarity requirements		
	Symbol on or close to Tell-tale	ON/CLOSE	
	Remarks:		

Parameter

FIGURE 11	FRONT FOG LAMPS		N/A
Front fog lamps	Control Fitted	YES/NO	
Colour of telisale light: garea	Control has correct symbol		
Г	Symbol meets visibility and clarity requirements		
VN	Symbol on or close to control	ON/CLOSE	
FU	Remarks:		
GREEN	Tell-tale Fitted	YES/NO	
	[Requirement: Optional]		
	Colour of Tell-tale		
	[Requirement: Green]		
	Tell-tale has correct symbol		
	Symbol meets visibility and clarity requirements		
	Symbol on or close to Tell-tale	ON/CLOSE	
	Remarks:		





Paragraph

Parameter

Complie s

FIGURE 12	REAR FOG LAMPS		N/A
Rear fog fomp ISO 2575 No 4-25	Control Fitted	YES/NO	
Colour of rell-tale light : yellow	Control has correct symbol		
Г. Л	Symbol meets visibility and clarity requirements		
$\Delta \perp$	Symbol on or close to control	ON/CLOSE	
$( \rightarrow )$	Remarks:		
V+			
Card south a			
	Tell-tale Fitted	YES/NO	
	[Requirement: Mandatory]		
	Colour of Tell-tale		
	[Requirement: Amber]		
	Tell-tale has correct symbol		
	Symbol meets visibility and clarity requirements		
	Symbol on or close to Tell-tale	ON/CLOSE	
	Remarks:		

#### FIGURE 13

#### Engine Ignition Cut Off In Out Of Use Position

Control Fitted	YES/NO	YES
Control has correct symbol		Y
Symbol meets visibility and clarity requirements		Y
Symbol on or close to control	ON/CLOSE	ON
Remarks:		

#### FIGURE 14

#### Engine Ignition Cut Off In Operating Position

Control Fitted	YES/NO	YES
Control has correct symbol		Y
Symbol meets visibility and clarity requirements		Y
Symbol on or close to control	ON/CLOSE	ON
Remarks:		





Paragraph

Parameter

Complie S

#### **FIGURE 15 GENERAL LIGHTING**



Control Fitted	YES/NO	YES
Control has correct symbol		Y
Symbol meets visibility and clarity requirements		Y
Symbol on or close to control	ON/CLOSE	CLOSE
Remarks:		
Tell-tale Fitted	YES	YES
[Requirement: Mandatory]**		
Colour of Tell-tale	GREEN	via panel
		lamp
Tell-tale has correct symbol		N/A
Symbol meets visibility and clarity requirements		N/A
Symbol on or close to Tell-tale	ON/CLOSE	N/A
Remarks:**		
See position lamps (Fig 4) for details of tell-tale		

#### **FIGURE 16**

L GREEN

#### POSITION (SIDE) LAMPS

Position (side) lamps	Control Fitted	YES/NO	YES
Colour of tell-tale light : green	Control has correct symbol		Y
Π 1	[Can be identified by Fig15]		
	Symbol meets visibility and clarity requirements		Y
2002	Symbol on or close to control	ON/CLOSE	CLOSE
JUN.	Remarks:		
GREEN			-
	Tell-tale Fitted	YES/NO	YES
	[Requirement: Mandatory] (can be via panel lamp		
	provided panel lamp cannot be turned off -		
	brightness adjustment acceptable)		
	Colour of Tell-tale		via panel
	[Requirement: Green - N/A if via panel lamp]		lamp
	Tell-tale has correct symbol (N/A if via panel lamp)		via panel lamp
	Symbol meets visibility and clarity requirements		via panel lamp
	Symbol on or close to Tell-tale	ON/CLOSE	via panel lamp
	Remarks:		cito



Paragraph

Parameter

Complie s

FIGURE 17	PARKING LAMPS		N/A
93/29 ONLY	Control Fitted	YES/NO	
	Control has correct symbol		
Not Applicable	Symbol meets visibility and clarity requirements		
For 2000/74	Symbol on or close to control	ON/CLOSE	
	Remarks:		
	Tell-tale Fitted	YES/NO	
	[Requirement: Optional]		
	Colour of Tell-tale		
•	[Requirement: Green]		
	Tell-tale has correct symbol		
GREEN	Symbol meets visibility and clarity requirements		
	Symbol on or close to Tell-tale	ON/CLOSE	
	Remarks:		

FIGURE 18	GEARBOX NEUTRAL INDICATOR		N/A
93/29	Tell-tale Fitted	YES/NO	
	[Requirement: Optional]		
FIGURE 17	Colour of Tell-tale		
2000/74	[Requirement: Green]		
	Tell-tale has correct symbol		
	Symbol meets visibility and clarity requirements		
	Symbol on or close to Tell-tale	ON/CLOSE	
• •			
GREEN	Remarks:		
			_
FIGURE 19	ELECTRIC STARTER		N/A
93/29	Control Fitted	YES/NO	
FIGURE 18	Control has correct symbol		
2000/74	O we had not a to the 'half' to an all all a 'the mean data and a 'the 'the second sec		
	Symbol meets visibility and clarity requirements		
( 5 )	Symbol on of close to control	UN/CLUSE	
	Remarks.		· · · · ·
N P			
			02-Sep-09
			02-Sep-09
			02-Sep-09



Paragraph	Parameter		Complie s
	Vehicle specification include Controls, Tell-tales and/or Indicators not listed in Annex 2 and Annex 3 Give details: <b>Speed change button, detail to see</b> <b>HRTK122-15</b>	YES/NO	YES
	Symbols used will not cause confusion with those listed in Annex 2 and Annex 3	YES/NO	YES





Paragraph

Parameter

Complie s

ANNEX 1 Check photos



Speedometer view



Left hand level view

Right hand level view





## TEST REPORT:

## Statutory markings for two or three wheel motor vehicles

03-012rev1

Report/Job Number: CSK206080

Page: 1 of 4

TEST DETAILS	
Subject	Statutory markings for two or three wheel motor vehicles
EC Directive	93/34/EC -2006/27/EC
ECE Regulation	N/A
Location of Test	No. 2-1, Longcang Dadao, Yuhua Economic Development
	Zone, Nanjing, P.R.China
Date of Test	22 June 2009
VCA Representative	Hongda. Zhao
Manufacturer's Representative	Xiaoyu.Zhang
Reason for Test	New approval

MANUFACTURER DETAILS	
Manufacturer's Name	SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO, LTD
Manufacturer's Address	N0.101,Qianming Eastrd ,Fengjing Industrial Zone, Jingshan
	District, Shanghai Flovince, F.R. China
Model Type & description	HRTK122
Category	L3e(electric)

CONCLUSION	The above mentioned vehicle was tested in accordance with EC Directive 93/34/EC as amended by 2006/27/EC and was found to comply in all respects
	Signature: Name: Hongda. Zhao Position: Test Engineer Date: 22. June 2009

LIST OF ANNEXES				
ANNEX	No of PAGES	SUBJECT		
1				
2				
3				
4				

MCWVTA ITEM 47 TR\*\* (TST REF 124)



### TEST REPORT: Statutory markings for two or three wheel motor vehicles

Paragraph		Parameter		Complies
TEST SPECIFICATION/WORST CASE RATIONALE: Variant 2 tested, it covered other variants.				
1	Risk assessment completed and stored in job folder			
2	Facilities and test equipments are appropriate			Conf.
3	3 Calibration certificates checked and valid, recorded below Conf. Note: only checking, no need any test facility			
Equip	oment	Serial No.	Calibration data	
	Manufacturer's	documentation complete		Conf.
	GENERAL			
2.1	The plate conforms to the model shown in the Appendix 1.It is firmly fixed in an accessible position to a part not subject to replacement, and is easily legible.			Conf.
4.2.2.2	The characters are at least 3 mm high.			Conf.
2.1	The plate makes provision for the following information:			
2.1.1	Name of Manufacturer: SHANGHAI HUARI ENTERPRISE DEVELOPMENT CO,.LTD			Conf.
2.1.2	Type Approval Number			Conf.
2.1.3	Vehicle identification number			Conf.

- 2.1.4 Static Sound Level: dB(A) at rev/min
- 2.1 The information above is in the correct order and indelible **Conf.**
- 2.3 Additional information (where applicable) is only marked outside the clearly marked rectangle below or to the side of the prescribed inscriptions

The prescribed rectangle only encloses the information



N/A

N/A



# TEST REPORT: Statutory markings for two or three wheel motor vehicles

Paragraph	Parameter	Complies
	prescribed in 2.1.1 to 2.1.4.	
	2. VEHICLE IDENTIFICATION NUMBER	
	2(a) On the Plate: SEEING INFO. DOC. IN THE DETAILS	Conf.
3.1.1	The number consists of three sections:	
3.1.1.1	the first has three characters which identify the manufacturer .	Conf.
3.1.1.2	the second has six characters which indicate the general characteristics of the vehicle. (For mopeds type/variant/version other vehicles type and variant).	Conf.
	each characteristic represented by no more than two characters	Conf.
	unused spaces filled by alphabetical or numerical characters .	Conf.
3.1.1.3	the third has eight characters (of which the last four are numerical) which identifies the particular vehicle.	Conf.
	unused spaces filled by zeros	Conf.
3.1.2	There are no spaces between the characters	Conf.
3.1.2	The number is marked on one line only	Conf.
3.1.2	If marked on two lines:	N/A
	The valid technical reason why it is not marked on one line only is .	
	No section is divided between the two lines	
	The beginning and end of each line is indicated by a symbol which is neither an Arabic numeral nor a capital Latin letter.	
	(in the case of the data plate only), the number is marked on one line only but has no special symbol at each end	
	2(b) On the Chassis / Frame	
3.1	The number is hammered or punched on the right hand side of the chassis or frame and is easily accessible.	Conf.



## TEST REPORT: Statutory markings for two or three wheel motor vehicles

Paragraph	Parameter	Complies
3	The marking has been designed to last 30 years.	Conf.
4.2.2.1	The characters are at least 4 mm high.	Conf.
3.1.1	The number consists of three sections as described in 2(a) above.	Conf.
3.1.2	There are no spaces between the characters	Conf.
3.1.2	The number is marked on one line only .	Conf.
3.1.2	If marked on two lines:	N/A
	The valid technical reason why it is not marked on one line only is	
	No section is divided between the two lines.	
	The beginning and end of each line is indicated by a symbol which is neither an Arabic numeral nor a capital Latin letter	
	3. CHARACTERS	
4.1	The characters used are Latin letters and Arabic numerals.	Conf.
	The manufacturer's name and VIN are marked in capital letters.	Conf.
4.2.1	The characters in the VIN do not include I, O, Q, dashes, asterisks and other specific signs	Conf.



