

ECE TYPE-APPROVAL CERTIFICATE



Communication concerning:² ~~Approval granted~~
~~Approval extended~~
~~Approval refused~~
~~Approval withdrawn~~
~~Production definitely discontinued~~

of a type device pursuant to Regulation No.

7 Approval No: **E24*7R02/26*0288*00**

Reason for extension:

N/A

1. Trade name or mark of the device:



2. Manufacturer's name for the type of device:

ZK-01-009

Variamt(s):

Variant 1: ZK-01-009;
Variant 2: ZK-01-008

3. Manufacturer's name and address:

Changzhou Zhongkai Vehicle Parts Co., Ltd.
Menghe Avenue, Henghe Town, Xinbei District, Changzhou City, Jiangsu Province P.C.: 213001

4. If applicable, name and address of manufacturer's representative:

N/A

5. Submitted for approval on:

10.01.2018

6. Technical service responsible for conducting approval tests:

TÜV SÜD Auto Service GmbH
Westendstraße 199
D-80686 München
Germany

7. Date of test report issued by that service:

04.01.2018

8. Number of report issued by that service:

17-01933-CX-SHA-00

¹ Distinguishing number of the country which has granted/refused/withdrawn approval (see approval provisions in the Regulation).

² Strike out which does not apply.

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9. Concise description:

9.1 By Category of lamps:

For mounting ~~either outside or inside or both~~²

Colour of light emitted: red/~~white~~²

Number, category and kind of light source(s):

Voltage and wattage:

Light source module specific identification code:

Only for limited mounting height of equal to or less than 750 mm above the ground (yes/no):

Geometric conditions of installation and relating variations (if any):

Application of an electronic light source control gear/variable intensity control:

(a) being part of the lamp: ~~yes~~/~~no~~²

(b) being not part of the lamp: ~~yes~~/~~no~~²

Input voltage(s) supplied by an electronic light source control gear/variable intensity control:

Electronic light source control gear/variable intensity control manufacturer and identification number (when the light source control gear is part of the lamp but is not included into the lamp body):

Rear position lamp R1
Stop lamp S1
Rear end-outline marker lamp RMI

Outside

Red

rear position lamp; 2*R10W
stop lamp; 1*P21W
rear end-outline marker lamp 1*R10W

Rear position lamp: 24V, 2*10W;
Stop lamp: 24V, 21W;
Rear end-outline marker lamp: 24V, 10W

N/A

No

See manufacturer's information document

N/A

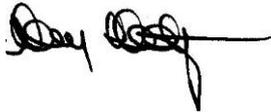
N/A

N/A

N/A

N/A

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- | | | |
|---|----------------------------|--------------------------------------|
| Variable luminous intensity: <i>yes/no</i> ² | | <i>No</i> |
| The front position lamp ² , rear position lamp ² , stop lamp ² , end-outline marker lamp ² , is only for use on a vehicle fitted with a tell-tale indication failure: <i>yes/no</i> ² | | <i>No</i> |
| 9.2 Function(s) produced by an interdependent lamp forming part of an interdependent lamp system: | | |
| Front position lamp | <i>yes/no</i> ² | |
| R1 Rear position lamp | <i>yes/no</i> ² | <i>No</i> |
| R2 Rear position lamp | <i>yes/no</i> ² | |
| S1 stop lamp | <i>yes/no</i> ² | <i>No</i> |
| S2 stop lamp | <i>yes/no</i> ² | |
| S3 stop lamp | <i>yes/no</i> ² | |
| S4 stop lamp | <i>yes/no</i> ² | |
| End-outline marker lamp | <i>yes/no</i> ² | <i>No</i> |
| 10. Position of the approval mark: | | <i>On the lens</i> |
| 11. Reason(s) for extension (if applicable): | | <i>N/A</i> |
| 12. Approval granted/ extended / refused / withdrawn ² : | | <i>Granted</i> |
| 13. Place: | | <i>Dublin</i> |
| 14. Date: | | <i>24th January, 2018</i> |
| 15. Signature:  | | |
| 16. The list of documents deposited with the Administrative Service which has granted approval, is annexed and may be obtained on request. | | |



Index to the Information Package

Date of issue:	<i>24th January, 2018</i>
Date of latest amendment:	<i>N/A</i>
Reason for extension/revision:	<i>N/A</i>
1. Additional conditions, and advisory notes on legal alternatives.	
2. Test report(s)	
- numbers(s):	<i>17-01933-CX-SHA-00</i>
- date of issue:	<i>04.01.2018</i>
- date of latest amendment:	<i>N/A</i>
3. Information document	
- number(s):	<i>ZK-01-009-00</i>
- date of issue:	<i>14.12.2017</i>
- date of latest amendment:	<i>N/A</i>
Documentation:	<i>16 pages</i>



Approval No: E24*7R02/26*0288*00

Appendix: **Additional conditions, and advisory notes on legal alternatives.**

A: Additional conditions:

1. The device, Type ZK-01-009, shall be marked as prescribed in the regulation.
2. The attached technical report, with any of its attachments, forms part of this Type Approval certificate.
3. Each individual product from series production shall be to the measurements specified in the attached drawings, and shall be manufactured only from the materials specified in the Approval documents.
4. Changes in the product are permitted only with the explicit permission of NSAI. Breaches of this requirement will lead to a withdrawal of the Type Approval, and in addition may be subject to criminal prosecution.
5. This Type Approval will expire when it is surrendered by the holder, or withdrawn by NSAI, or when the approved type of product no longer conforms to legal requirements. The recall of the Type Approval can be issued by NSAI when the conditions required for the issuing or continuation of the Type Approval are no longer current, or when the Approval holder is in breach of the duties attached to the Type Approval, or when it is established that the approved type no longer meets the requirements of traffic safety.
6. NSAI may at any time check the correct performance of the duties imposed by the grant of this Type Approval, and in order to do so, may make tests, or have tests made.
7. Changes in the company name, address or manufacturing site, as well as in any of the sales or other agents specified in the issuing of the approval must immediately be notified to the NSAI.
8. The duties imposed by the issuing of this certificate are not transferable. The legal protection of third parties is not affected by this certificate.
9. When the manufacture or sale of the vehicle, system, component or separate technical unit has not been started within one year of the date of issue of this certificate, then NSAI is to be informed. This requirement also applies when the manufacture or sale has been halted for more than one year, or when it ought to have been halted for more than one year. The initial commencement of manufacture or sale, or the resumption of manufacture or sale, shall then be notified to NSAI within one month of commencement or resumption.

B : Legal Options

Any objection to the requirements set out in this certificate shall be made within one month of the date of issue. The objection shall be made, in writing, to NSAI in Dublin.

Technical Report No.: 17-01933-CX-SHA-00
Manufacturer: Changzhou Zhongkai Vehicle Parts Co., Ltd.
Type: ZK-01-009

TECHNICAL REPORT

No.: 17-01933-CX-SHA-00

Test according to ECE regulation relating to

Rear position lamp R1 and stop lamp S1 and rear end-outline marker lamp RM1

ECE Regulation No.: 7

supplement 26 to the 02 series of amendments

Approvals granted up to now		
ECE	Number of approval	Date
	---	---

Technical Report No.: 17-01933-CX-SHA-00
Manufacturer: Changzhou Zhongkai Vehicle Parts Co., Ltd.
Type: ZK-01-009

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I. Technical description

- 0.1. Make (trade name of manufacturer) : 
- 0.2. Type : ZK-01-009
- 0.2.1. Variants : Variant 1: ZK-01-009;
Variant 2: ZK-01-008
- 0.3. Means of identification of type : By digits and letters
- 0.4. By category of lamp : Rear position lamp R1 and stop lamp S1
and rear end-outline marker lamp RM1
- For mounting either outside or inside or both : Outside
- Color of light emitted : Red
- Number, category and kind of light source(s) : 2*R10W for rear position lamp; 1*P21W
for stop lamp; 1*R10W for rear end-
outline marker lamp
- Voltage and wattage : Rear position lamp: 24V and 2*10W;
Stop lamp: 24V and 21W;
Rear end-outline marker lamp: 24V and
10W
- Light source module specific identification code : N/A
- Only for limited mounting height of equal to or less than 750 mm above the ground : No
- Geometrical conditions of installation and relating variations, if any : See manufacturer's information document
- Application of an electronic light source control gear/variable intensity control : N/A
- Being part of the lamp : N/A
- Being not part of the lamp : N/A
- Input voltage(s) supplied by an electronic light source control gear/variable intensity control : N/A

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Electronic light source control gear/
variable intensity control manufacturer
and identification number (when the
light source control gear is part of the
lamp but is not included into the lamp
body) : N/A

Variable luminous intensity : No

The rear position lamp and stop lamp
and end-outline marker lamp is only for
use on a vehicle fitted with a tell-tale
indicating failure : No

0.5. Function(s) produced by an interdependent lamp forming part of an interdependent
lamp system:

R1 Rear position lamp : No
S1 Stop lamp : No
End-outline marker lamp : No

0.6. Name and address of manufacturer : Changzhou Zhongkai Vehicle Parts Co.,
Ltd.
Menghe Avenue, Henghe Town, Xinbei
District, Changzhou City, Jiangsu
Province P.C.: 213001

0.8. Address of assembly plant : See 0.5.

0.9. Location of the approval mark : On the lens

0.10. If applicable, name and address of the
manufacturer's representative : N/A

Technical Report No.: 17-01933-CX-SHA-00
Manufacturer: Changzhou Zhongkai Vehicle Parts Co., Ltd.
Type: ZK-01-009

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II. Test record

1. Test conditions

- 1.1. Technical data of the test samples : Two samples were tested.
Sample No. 1, left side mounting.
Sample No. 2, right side mounting.
For information about the form of the lamp, the position of the reference point and the reference axis, see information document.
- 1.2. Test procedures used : According to ECE Regulation No.: 7.02.
- 1.3. Measuring and test equipment : Full automatic photometric test system for automobile lamps
EVERFINE PHOTO-E-INFO CO.,LTD
Type GO-HD5

2. Test results

2.1. General Specifications

The devices have been designed and constructed that in normal conditions of use, and notwithstanding the vibrations to which they may be subjected in such use, their satisfactory operation remains assured and they retain the characteristics prescribed by this Regulation.

No light source module or light generator is used.

2.2. Intensity of light emitted

2.2.1. Rear position lamp R1

2.2.1.1. Sample No. 1 and Sample No. 2, normal mode, 2*R10W lit together, test voltage 14.109V.

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	Sample No. 1	Sample No. 2	
1	5L	10U	0.80	17.00	5.25	5.85	Complies
2	5R	10U	0.80	17.00	5.43	6.40	Complies
3	20R	5U	0.40	17.00	4.39	5.24	Complies
4	10R	5U	0.80	17.00	6.12	6.86	Complies
5	H	5U	2.80	17.00	7.68	8.26	Complies
6	10L	5U	0.80	17.00	6.36	6.25	Complies
7	20L	5U	0.40	17.00	4.98	4.80	Complies
8	10L	V	1.40	17.00	8.57	9.28	Complies
9	5L	V	3.60	17.00	9.63	10.28	Complies
10	H	V	4.00	17.00	9.69	11.22	Complies
11	5R	V	3.60	17.00	9.68	11.06	Complies
12	10R	V	1.40	17.00	7.48	9.83	Complies
13	20R	5D	0.40	17.00	5.02	7.30	Complies
14	10R	5D	0.80	17.00	9.39	12.89	Complies
15	H	5D	2.80	17.00	12.34	14.31	Complies
16	10L	5D	0.80	17.00	10.87	13.68	Complies
17	20L	5D	0.40	17.00	5.98	8.96	Complies
18	5L	10D	0.80	17.00	8.84	9.20	Complies
19	5R	10D	0.80	17.00	7.48	10.01	Complies
20	All directions Min.		0.05	---	0.73	0.98	Complies
21	All directions Max.		---	17.00	12.95	15.29	Complies

2.2.1.2. Sample No. 1 and Sample No. 2, failed mode, 1*R10W lit on, test voltage 14.109V.

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	Sample No. 1	Sample No. 2	
1	5L	10U	0.80	17.00	2.44	3.08	Complies
2	5R	10U	0.80	17.00	2.61	3.42	Complies
3	20R	5U	0.40	17.00	2.05	2.78	Complies
4	10R	5U	0.80	17.00	2.90	3.69	Complies
5	H	5U	2.80	17.00	3.72	4.25	Complies
6	10L	5U	0.80	17.00	3.14	3.38	Complies
7	20L	5U	0.40	17.00	2.36	2.66	Complies
8	10L	V	1.40	17.00	4.10	4.98	Complies
9	5L	V	3.60	17.00	4.52	5.84	Complies
10	H	V	4.00	17.00	4.56	6.24	Complies
11	5R	V	3.60	17.00	4.55	6.01	Complies
12	10R	V	1.40	17.00	3.64	5.03	Complies
13	20R	5D	0.40	17.00	2.41	3.87	Complies
14	10R	5D	0.80	17.00	4.52	6.98	Complies
15	H	5D	2.80	17.00	5.93	7.98	Complies
16	10L	5D	0.80	17.00	5.10	7.68	Complies
17	20L	5D	0.40	17.00	2.63	4.87	Complies
18	5L	10D	0.80	17.00	4.03	4.89	Complies
19	5R	10D	0.80	17.00	3.44	5.25	Complies
20	All directions Min.		0.05	---	0.42	0.60	Complies
21	All directions Max.		---	17.00	6.19	8.39	Complies

2.2.2. Stop lamp S1

2.2.2.1. Sample No. 1 and Sample No. 2, test voltage 13.879V.

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	Sample No. 1	Sample No. 2	
1	5L	10U	12.00	260.00	64.68	66.05	Complies
2	5R	10U	12.00	260.00	106.57	93.04	Complies
3	20R	5U	6.00	260.00	59.56	41.62	Complies
4	10R	5U	12.00	260.00	133.49	122.41	Complies
5	H	5U	42.00	260.00	118.6	120.42	Complies
6	10L	5U	12.00	260.00	38.88	39.16	Complies
7	20L	5U	6.00	260.00	16.80	18.37	Complies
8	10L	V	21.00	260.00	41.88	43.91	Complies
9	5L	V	54.00	260.00	90.38	86.57	Complies
10	H	V	60.00	260.00	123.43	119.76	Complies
11	5R	V	54.00	260.00	136.86	137.78	Complies
12	10R	V	21.00	260.00	129.04	131.86	Complies
13	20R	5D	6.00	260.00	67.38	56.73	Complies
14	10R	5D	12.00	260.00	155.05	147.58	Complies
15	H	5D	42.00	260.00	130.68	123.26	Complies
16	10L	5D	12.00	260.00	42.47	43.70	Complies
17	20L	5D	6.00	260.00	17.44	19.84	Complies
18	5L	10D	12.00	260.00	98.38	95.48	Complies
19	5R	10D	12.00	260.00	157.71	136.59	Complies
20	All directions Min.		0.30	---	8.82	6.30	Complies
21	All directions Max.		---	260.00	162.92	156.28	Complies

2.2.3. Rear end-outline marker lamp RM1

2.2.3.1. Sample No. 1 and Sample No. 2, test voltage 13.879V.

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	Sample No. 1	Sample No. 2	
1	5L	10U	0.80	17.00	1.57	1.85	Complies
2	5R	10U	0.80	17.00	1.28	2.13	Complies
3	20R	5U	0.40	17.00	0.89	2.23	Complies
4	10R	5U	0.80	17.00	1.06	2.11	Complies
5	H	5U	2.80	17.00	3.29	3.82	Complies
6	10L	5U	0.80	17.00	1.80	1.65	Complies
7	20L	5U	0.40	17.00	1.12	1.15	Complies
8	10L	V	1.40	17.00	1.92	2.23	Complies
9	5L	V	3.60	17.00	4.37	4.51	Complies
10	H	V	4.00	17.00	4.91	5.23	Complies
11	5R	V	3.60	17.00	4.24	5.14	Complies
12	10R	V	1.40	17.00	1.84	2.43	Complies
13	20R	5D	0.40	17.00	0.82	2.31	Complies
14	10R	5D	0.80	17.00	1.20	2.13	Complies
15	H	5D	2.80	17.00	3.96	4.26	Complies
16	10L	5D	0.80	17.00	1.99	1.68	Complies
17	20L	5D	0.40	17.00	1.21	1.12	Complies
18	5L	10D	0.80	17.00	2.16	1.93	Complies
19	5R	10D	0.80	17.00	1.68	2.14	Complies
20	All directions Min.		0.05	---	0.24	0.35	Complies
21	All directions Max.		---	17.00	5.13	5.62	Complies

2.3. Colour – Red

2.3.1. Rear position lamp R1

Sample	Measured values		Limits		Conclusion
	x	y	$y \leq 0.335$	$y \geq 0.980 - x$	
No. 1	0.6802	0.3108	Yes	Yes	Complies
No. 2	0.6805	0.3116	Yes	Yes	Complies

2.3.2. Stop lamp S1

Sample	Measured values		Limits		Conclusion
	x	y	$y \leq 0.335$	$y \geq 0.980 - x$	
No. 1	0.6817	0.3080	Yes	Yes	Complies
No. 2	0.6822	0.3084	Yes	Yes	Complies

2.3.3. Rear end-outline marker lamp RM1

Sample	Measured values		Limits		Conclusion
	x	y	$y \leq 0.335$	$y \geq 0.980 - x$	
No. 1	0.6866	0.3022	Yes	Yes	Complies
No. 2	0.6870	0.3028	Yes	Yes	Complies

2.4. Apparent surface

2.4.1. Rear position lamp R1

Limit (I)	Limit (O)	Limit (U)	Limit (D)
26mm	26mm	56mm	56mm

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Manufacturer: Changzhou Zhongkai Vehicle Parts Co., Ltd.
Type: ZK-01-009

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2.4.2. Stop lamp S1

Limit (I)	Limit (O)	Limit (U)	Limit (D)
38mm	38mm	56mm	56mm

2.4.3. Rear end-outline marker lamp RM1

Limit (I)	Limit (O)	Limit (U)	Limit (D)
18mm	18mm	56mm	56mm

3. Specimen submitted to test on : 2017-12-14 (YYYY-MM-DD)
4. Place of test : Jiangsu Huachen Vehicle Inspection Co.,
Ltd., Zhenjiang City, P.R. China
- Date of test : 2017-12-19 (YYYY-MM-DD)

III. Enclosures

- Manufacturer's information : ZK-01-009-00
document No.
- Dated on : 2017-12-14 (YYYY-MM-DD)

IV. Statement of conformity

The information folder as mentioned under No. III and the type described therein are in compliance with the test specification mentioned above. The worst-case was selected in accordance with document "Preparation of Test Reports".

The test report may be reproduced and published in full and by the client only. It can be reproduced partially with the written permission of the test laboratory only.

München, 2018-01-04
 (YYYY-MM-DD)



Joe Zhou

Test Laboratory / DIN EN ISO 17025

Genehmigungsbehörde/ Approval authority	Land/Country	Registriernummer/ Registration-number	Aktueller Benennungsumfang/ Actual scope list
Kraftfahrt-Bundesamt (KBA)	Deutschland/ Germany	KBA-P 00100-10	www.kba.de
Vehicle Certification Agency (VCA)	Vereintes Königreich/ United Kingdom	VCA-TS-006	http://ec.europa.eu/enterprise/sectors/automotive/approval-authorities-technical-services/technical-services/index_en.htm
Approval Authority of the Netherlands (RDW)	Niederlande/ The Netherlands	RDWT-082-XX	
National Standards Authority of Ireland (NSAI)	Irland/ Ireland	Technical Service Number: 49	
Vehicle Safety Certification Center (VSCC)	Taiwan/ Taiwan	DE04-06-2	http://www.vsc.org.tw/English/Default.aspx

Information folder No. : ZK-01-009-00

First application date : December 14, 2017

1. Specification data

Type		ZK-01-009									
Variant		Variant 1: ZK-01-009 Variant 2: ZK-01-008									
Function		Rear group lamp									
		Rear retro-reflector Device	Side retro-reflector Device	License plate lamp	Rear direction indicator lamp	Stop lamp	Rear position lamp	Rear end -outline marker lamp	Reversing lamp	Rear fog lamp	Side marker lamp
Color		Red	Amber	Colorless	Amber	Red	Red	Red	White	Red	Amber
Rated	Voltage	--	--	24V	24V	24V	24V	24V	24V	24V	24V
	Wattage	--	--	10W	21W	21W	2*10W	10W	21W	21W	10W
Application Regulation ECE		R3.02 Class IB	R3.02 Class IB	R4.00 Cat. 1b	R6.01 Cat. 2a	R7.02 Cat. S1	R7.02 Cat. R1	R7.02 Cat. RM1	R23.00 AR	R38.00 Cat. F1	R91.00 Cat. SM1
Location of marking	Number and category of light source	--	--	R10W	P21W	P21W	2*R10W	R10W	P21W	P21W	R10W
	Trade mark	Marked on housing									
											
	Approval mark	Marked on lens									
Remark		Sequential activation of light sources: No									
		The lamp is only for use on a vehicle fitted with a tell-tale indicating failure: No									

2. Construction and material

Construction	Material	Remarks
Lens	AS	L.P.L.+R.L.: Clear S.D.+R.D.L.+S.M.L.: Amber R.D.+S.L.+R.P.L.+R.E.L.+R.F.L.: Red
Reflector	PP	AL vacuum vapour coating Painting on the inside surface Colour: Metal silver
Housing	ABS	Colour: Black
Electrical Wiring	Copper covered with insulation	--

3. Name and address of manufacturer

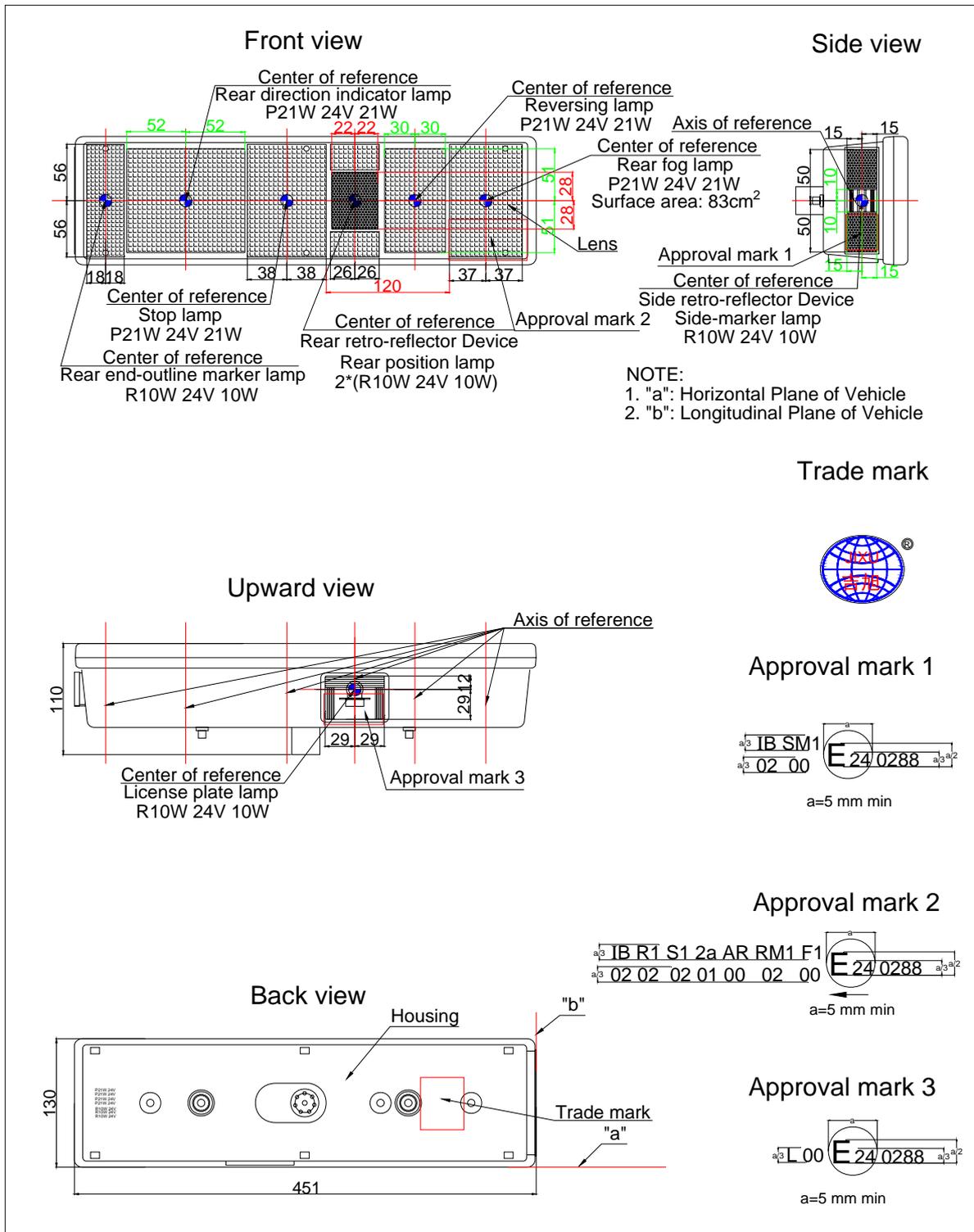
Changzhou Zhongkai Vehicle Parts Co., Ltd.
: Menghe Avenue, Henghe Town, Xinbei District,
Changzhou City, Jiangsu Province P.C.: 213001

4. Name and address of the assembly plant

: See 3.

5. Name and address of the manufacturer's representative

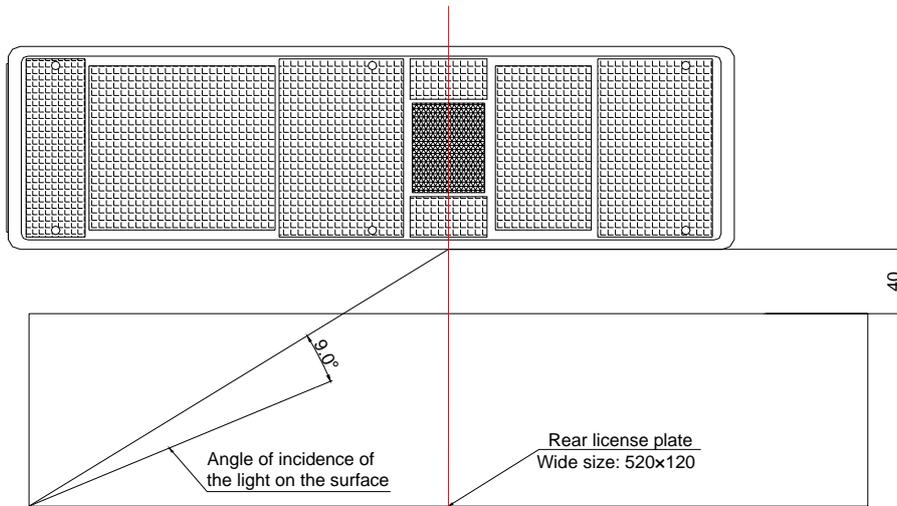
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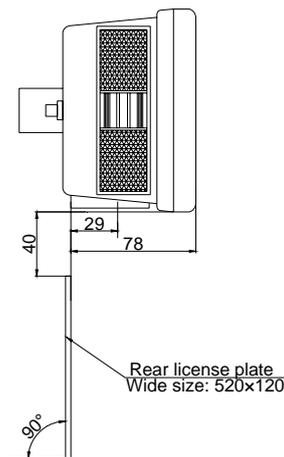
Product Type	ZK-01-009
General assembly drawing (Left side)	
Drawing No.	ZK-01-009-01

Installation requirements of rear license plate

Front view



Side view



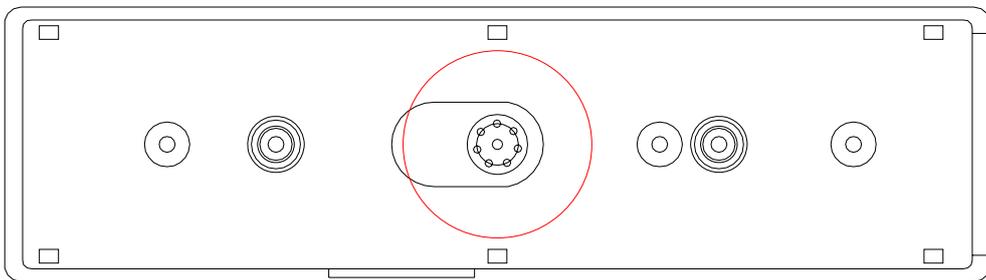
Product Type	ZK-01-009
Installation requirements of rear license plate	
Drawing No.	ZK-01-009-03

Information folder No. : ZK-01-009-00

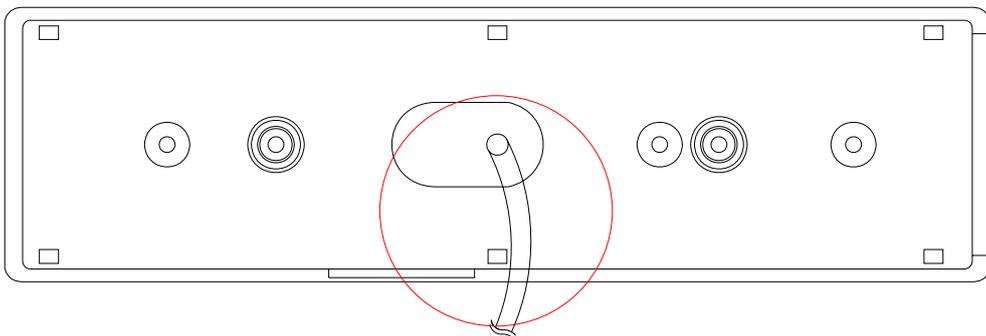
First application date : December 14, 2017

Back view

Variant 1



Variant 2



Product Type	ZK-01-009
Variant	
Drawing No.	ZK-01-009-04