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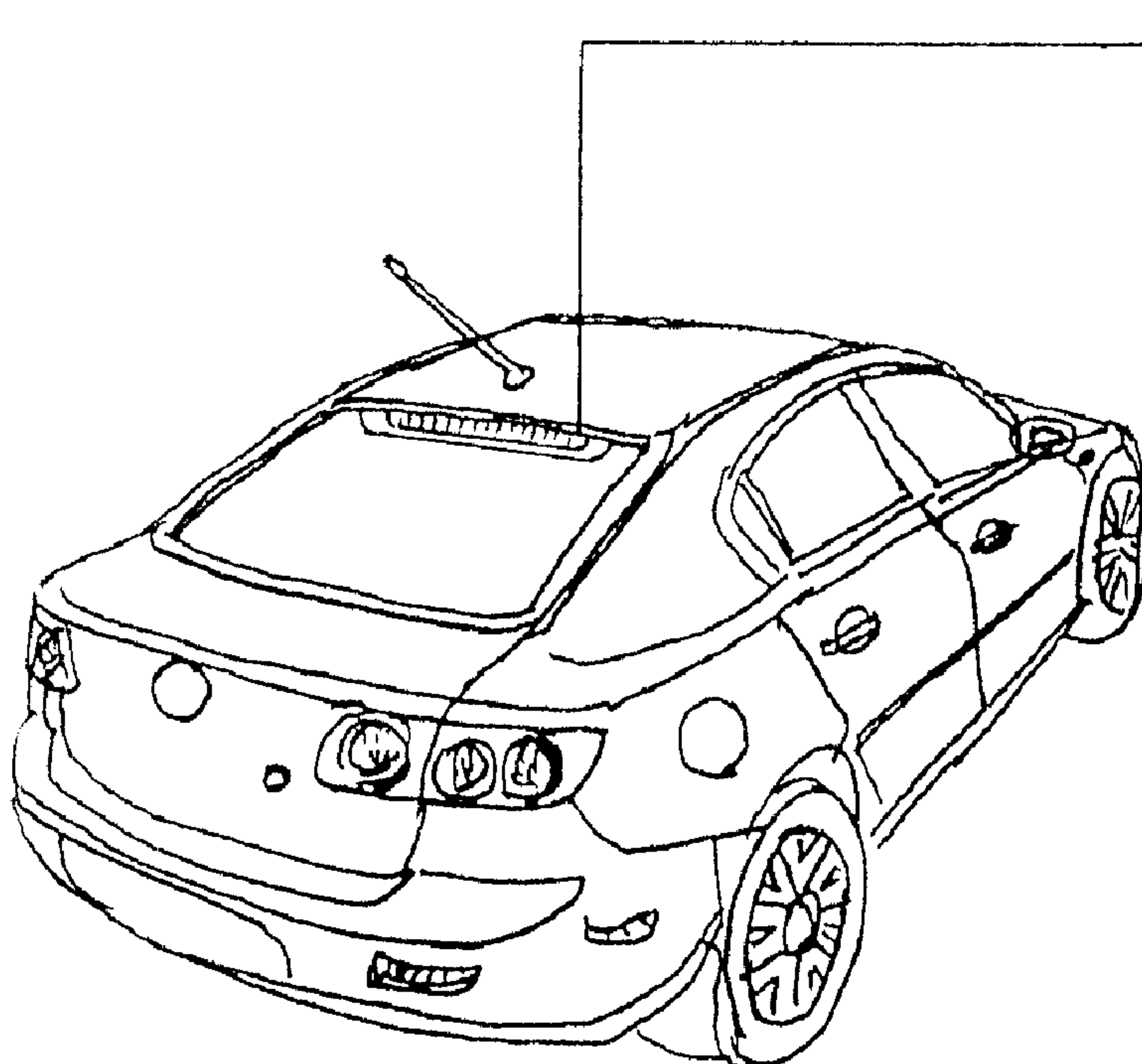
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(54) Titre : UN NOUVEAU TYPE DE FEU ARRIERE POUR VEHICULES

(54) Title: A NEW TYPE OF VEHICLE'S REAR SPEED LIGHTS



Rear speed lights
in the center interior
of the rear window

(57) Abrégé/Abstract:

My invention is a New Type of Vehicle's Rear Speed Lights. It shows speed of a vehicle to other drivers; helps to keep a safer distance between vehicles, reducing the chances of accidents. Such new type of vehicle's rear speed lights is an upgrade based on the high-mount brake light of vehicles, the device is made up of 32 horizontal small lights (Drawing A, A-1, A-2, A-3, A-4, A-5) or 16 (16 layers) upright small lights (Drawing B, B-1, B-2) in a casing with a red outer covering. The shade and the structure of this device is similar to the high-mount brake light, equipped at the same place on vehicles with the high-mount brake light, but the function and usage differs greatly.



A New Type of Vehicle's Rear Speed Lights

Applicant: Wei Liu

Filing Date: Sep. 28th 2006

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Abstract

ABSTRACT

My invention is a New Type of Vehicle's Rear Speed Lights. It shows speed of a vehicle to other drivers; helps to keep a safer distance between vehicles, reducing the chances of accidents.

Such new type of vehicle's rear speed lights is an upgrade based on the high-mount brake light of vehicles, the device is made up of 32 horizontal small lights (Drawing A, A-1, A-2, A-3, A-4, A-5) or 16 (16 layers) upright small lights (Drawing B, B-1, B-2) in a casing with a red outer covering. The shade and the structure of this device is similar to the high-mount brake light, equipped at the same place on vehicles with the high-mount brake light, but the function and usage differs greatly.

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Description

DESCRIPTION

Purpose and functions:

Many kinds of vehicles have High-mount brake lights. My invention, a new type of vehicle's rear speed lights are an upgrade based on the high-mount brake light, the shape and the structure of the device are similar to the high mount brake light presently in use, but the functions and usage differ greatly. High-mount brake light serves the same function as the brake lights; they only show that a vehicle is slowing down, giving cautions to the drivers behind. This does not show the speed of the vehicle, meaning no difference in appearance between a touch of the brake and a rapid stop. During stormy days, and in other kinds of weather that provide poor visibility, especially on expressways, this is very dangerous. We often see some vehicles in front braking without knowing the speed difference, hypothesizing it a light brake. As we get closer and see the vehicle in front of us almost stopping entirely, it would usually be too late to brake and may cause accidents. Such things happen around the world hourly causing countless lives to be lost and property damages. This is the reason why I would like to have the rear speed light shown to the drivers behind with this new device equipped on vehicles. It helps keep a safer distance between vehicles, reducing the chances of accidents and death or injuries.

Practical application:

This new type rear speed lights may be used on all kinds of vehicles, cars, trucks, jeeps, vans, buses (include school buses), and some special vehicles, such as fire trucks, ambulances, construction vehicles, (maybe except police cars).

Ways of functioning:

Such new type vehicle's rear speed light is horizontal in line, equipped in the center interior upper of the rear window (Drawing A-1), or on the centre exterior upper of the rear window (Drawing A-2), or in the center lower of the rear window (Drawing A-3), or at the top of the trunk lid (Drawing A-4), or on the spoiler (Drawing A-5). It is made up of 32 small lights in a casing with a red outer covering. From the center of the speed lights to the both sides, when each symmetrical pair of the lights turn on, indicates that the speed of the vehicle increases 10km/h; Going backward, from the both sides to the center of the speed lights, when the each symmetrical pair of lights turn off, indicates that the speed of the vehicle reduces 10km/h. All lights will be on when the vehicle stops completely, the speed is 0km/h; No lights will be on when the speed of the vehicle reaches over 150km/h. (Drawing A)

The device may also be upright, mounted at the sides of rear window (Drawing B-1, B-2), made up of 16 small lights or 16 layers of small lights in a casing with a red outer covering. When the upright speed lights work from the bottom up to the top, or from the top down to the bottom, each light or each layer of lights turn on, indicates that the speed of the vehicle increases 10km/h. Going backward, when each light or each layer lights turn off, indicates that the speed of the vehicle reduces 10km/h. (Drawing B)

Such speed lights can also be work with electronic numerical screen showing the speed, but this will be a problem in bad weathers due to visibility. If this device appears too large, it will affect the drivers; if too small will not provide its use. Keeping the model of present high-mount brake light is ideal. If it is in wintertime, the speed lights are covered by snow, but they might have half appeared with enough to work the deed, because the speed lights are symmetrical from the center.

Technology aspects:

We have no trouble in today technologies for making the speed lights, the device needs a controller uses the speed feedback signal of the vehicle to control the output based on the program to control the working of the rear speed lights, and the electrical circuit, which connects controller and the rear speed lights.

Market:

Until today, all kinds of vehicles have no such rear speed lights; this means that the new type of vehicle's rear speed lights has absolute large market. It is low cost, simple techniques, new functions, small and light, very easy to be mass-produced, assemble and shipped. It makes vehicles to be better-looking, more functional, higher- class. So, the company who goes first to produce this new type vehicle's rear speed lights, will occupy the absolute large market and will serve a great pleasure to all drivers and passengers!

A New Type of Vehicle's Rear Speed Lights

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Claims

CLAIMS

A vehicle's rear speed light comprising:

1. 32 horizontal small lights are in line in a casing with a red outer covering.

The shape and the structure of the device are similar to the High-mount brake light.

- The device is mounted in the center exterior upper of the rear window; or in the center interior of the rear window; or in the center lower of the rear window; or at the top of the trunk lid; or on the spoiler.
 - From the center of the speed lights to the both sides, when each symmetrical pair of the lights turn on, indicates that the speed of the vehicle increases 10km/h; Going backward, from the both sides to the center of the speed lights, when the each symmetrical pair of lights turn off, indicates that the speed of the vehicle reduces 10km/h. All lights will be on when the vehicle stops completely, the speed is at 0km/h; No lights will be on when the speed of the vehicle reaches over 150km/h due to excessive speeding.
2. 16 or 16 layers upright small lights are in line in a casing with a red outer covering.
 - Because the speed lights may be also upright, mounted at the sides of the rear window.
 - When the upright 16 or 16 layers speed lights work from the bottom up to the top, or from the top down to the bottom, each light or each layer lights turn on, indicates that the speed of the vehicle increases 10km/h; Going backward, when each light or each layer lights turn off, indicates that the speed of the vehicle reduces 10km/h.
 3. A controller uses the speed feedback signal of the vehicle to a controlling output based on the program to control the working of the rear speed lights.
 4. The electrical circuit, which connects controller and the rear speed lights.

Application number / numéro de demande: 02562207

Figures: Photographs - (x7)

Pages: _____

Unscannable item(s)

received with this application

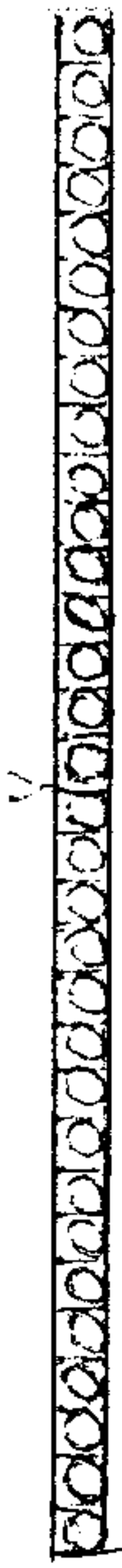
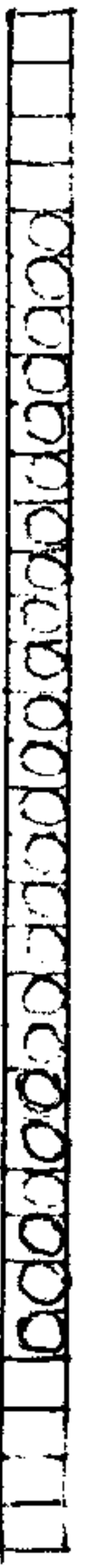
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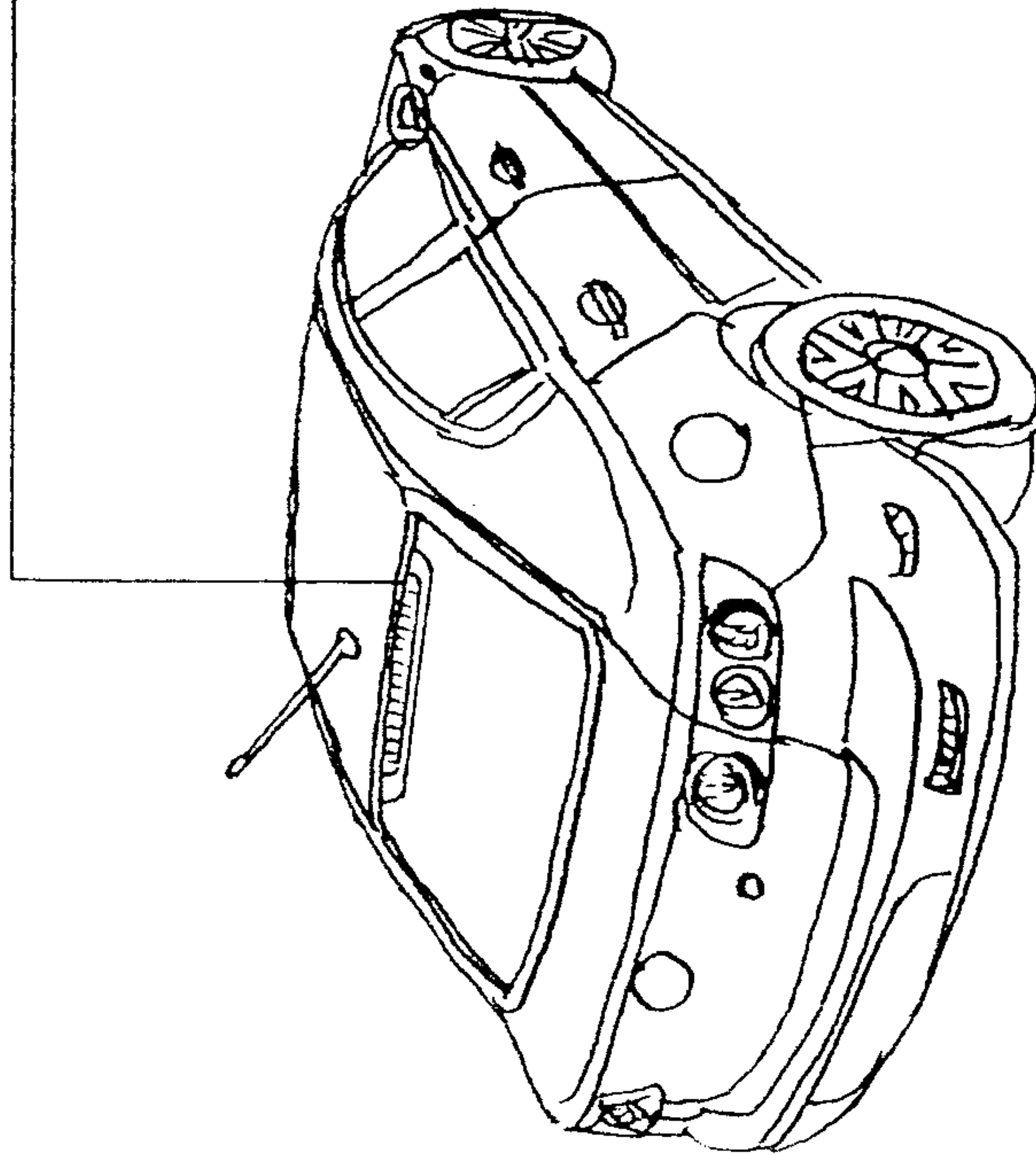
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Drawing A

Structure of The New Type Rear Speed Lights	Number of the lights at work	Speed (km/h)
	32	0 - 10
	30	10 - 20
	28	20 - 30
	26	30 - 40
	24	40 - 50
	22	50 - 60
	20	60 - 70
	18	70 - 80
	16	80 - 90
	14	90 - 100
	12	100 - 110
	10	110 - 120
	8	120 - 130
	6	130 - 140
	4	140 - 150
	2	> 150
	0	> 150

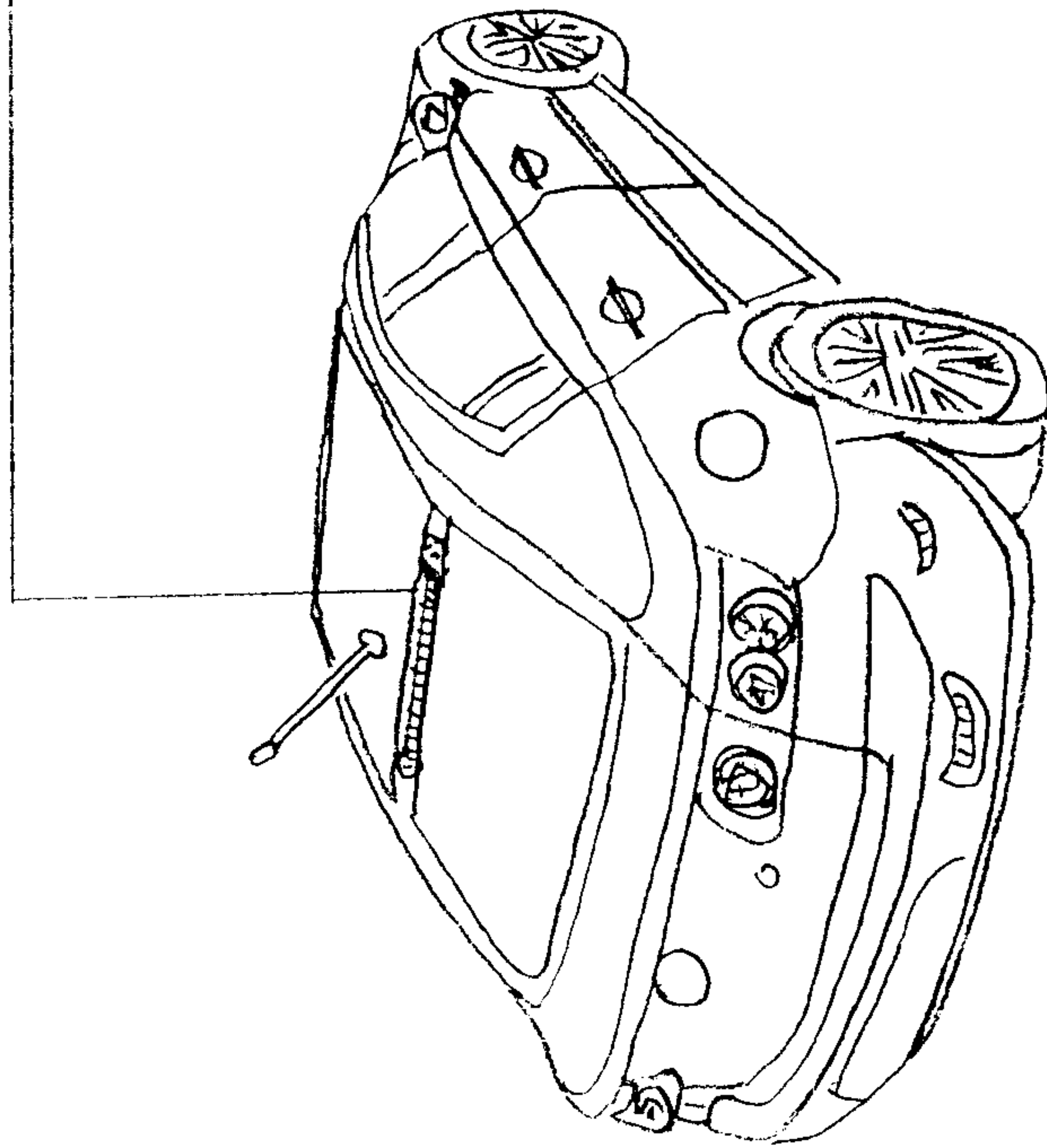
Drawing A-1

Rear speed lights
in the center interior
of the rear window



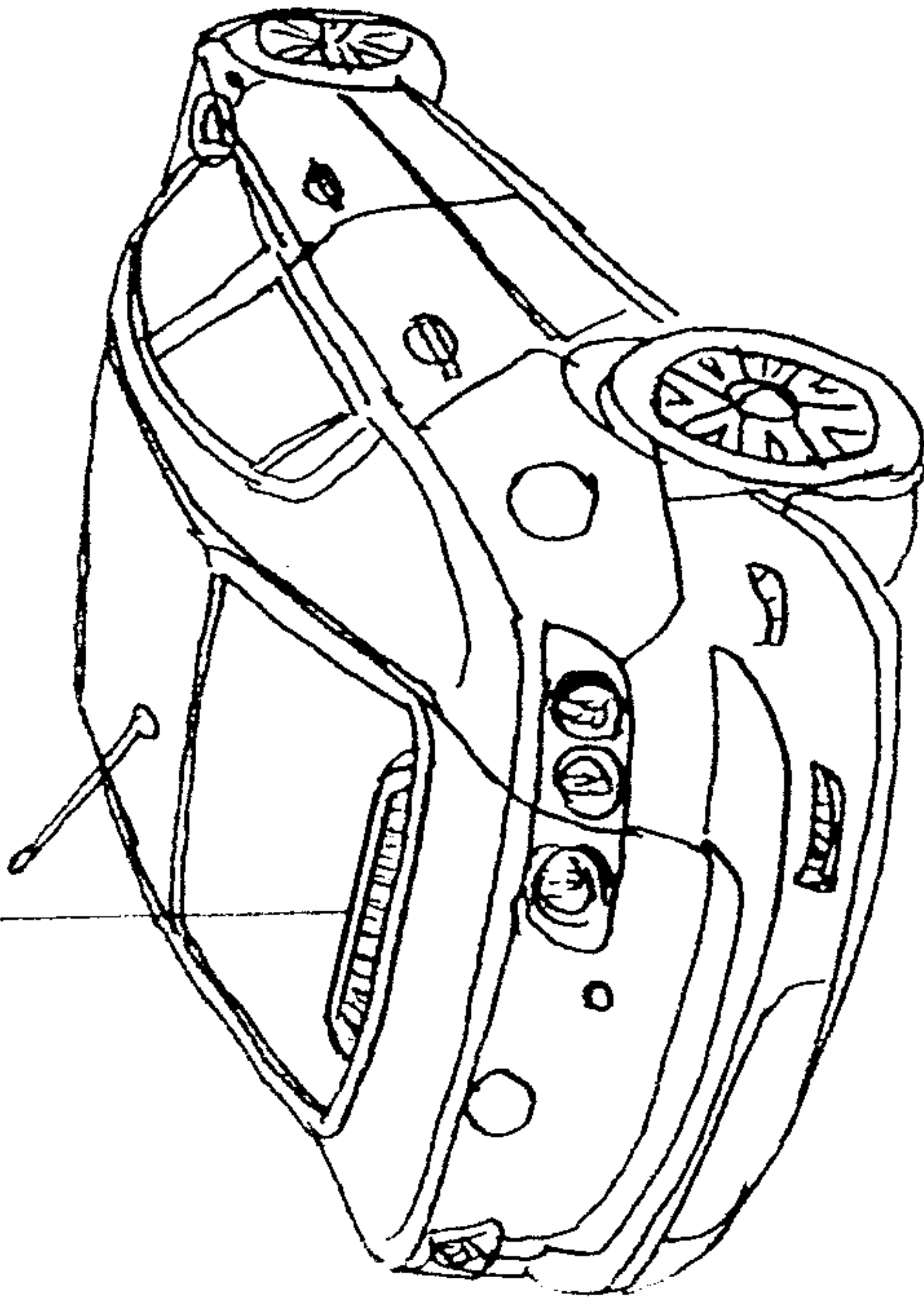
Drawing A-2

Rear speed lights on
the center exterior upper
of the rear window



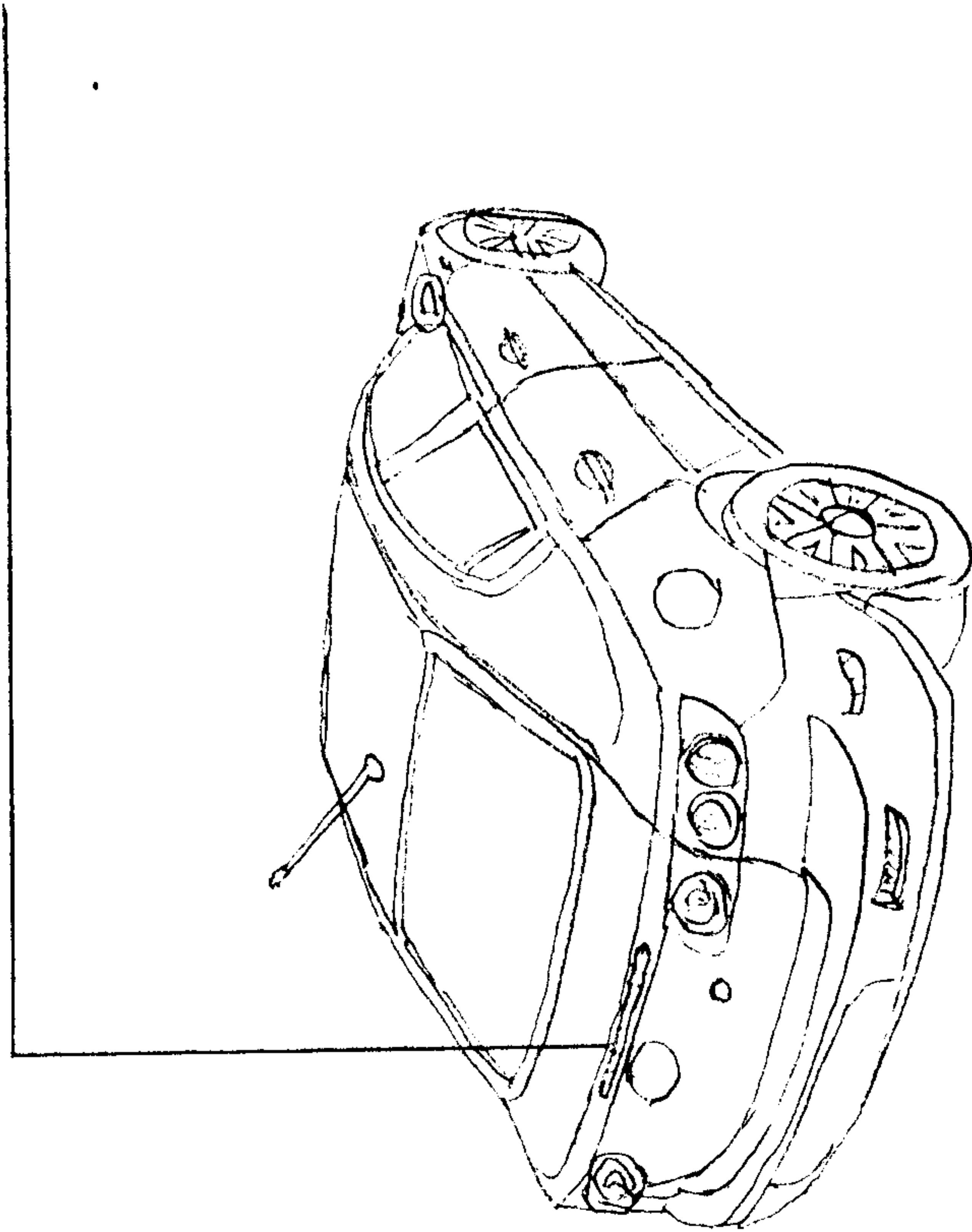
Drawing A-3

Rear speed lights
in the center lower
of the rear window



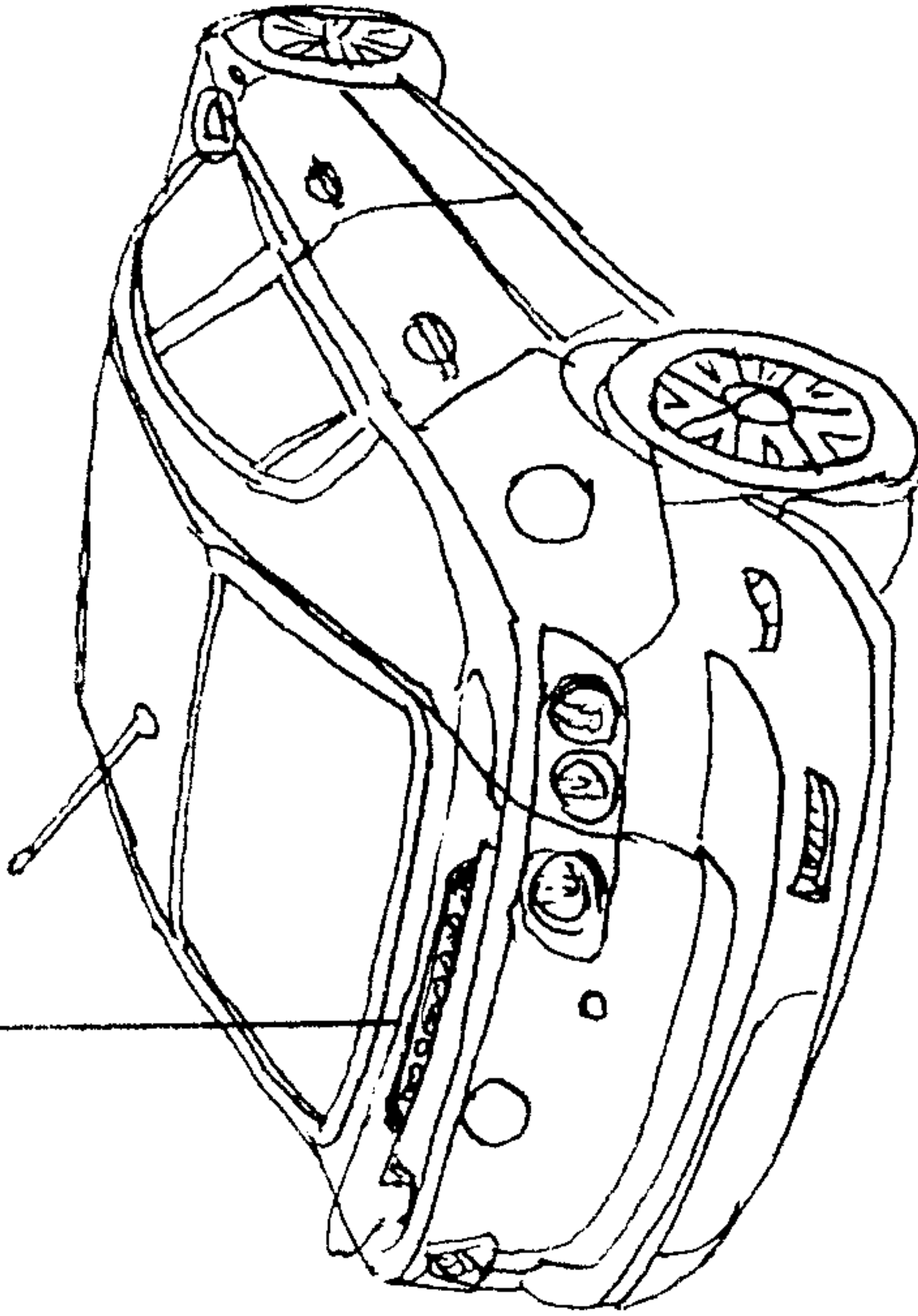
Drawing A-4

Rear speed lights
at the top mount
back of the trunk



Drawing A-5

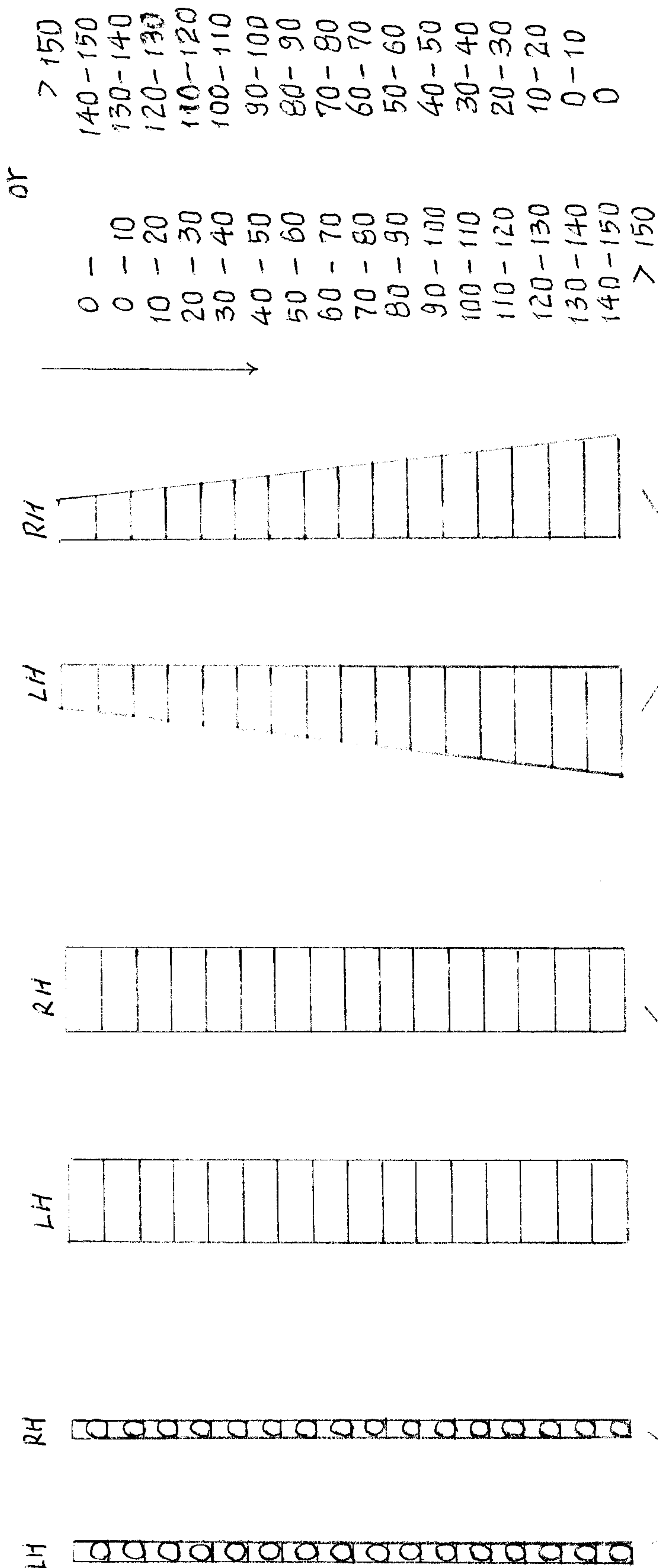
Rear speed lights
on the spoiler



Drawing B

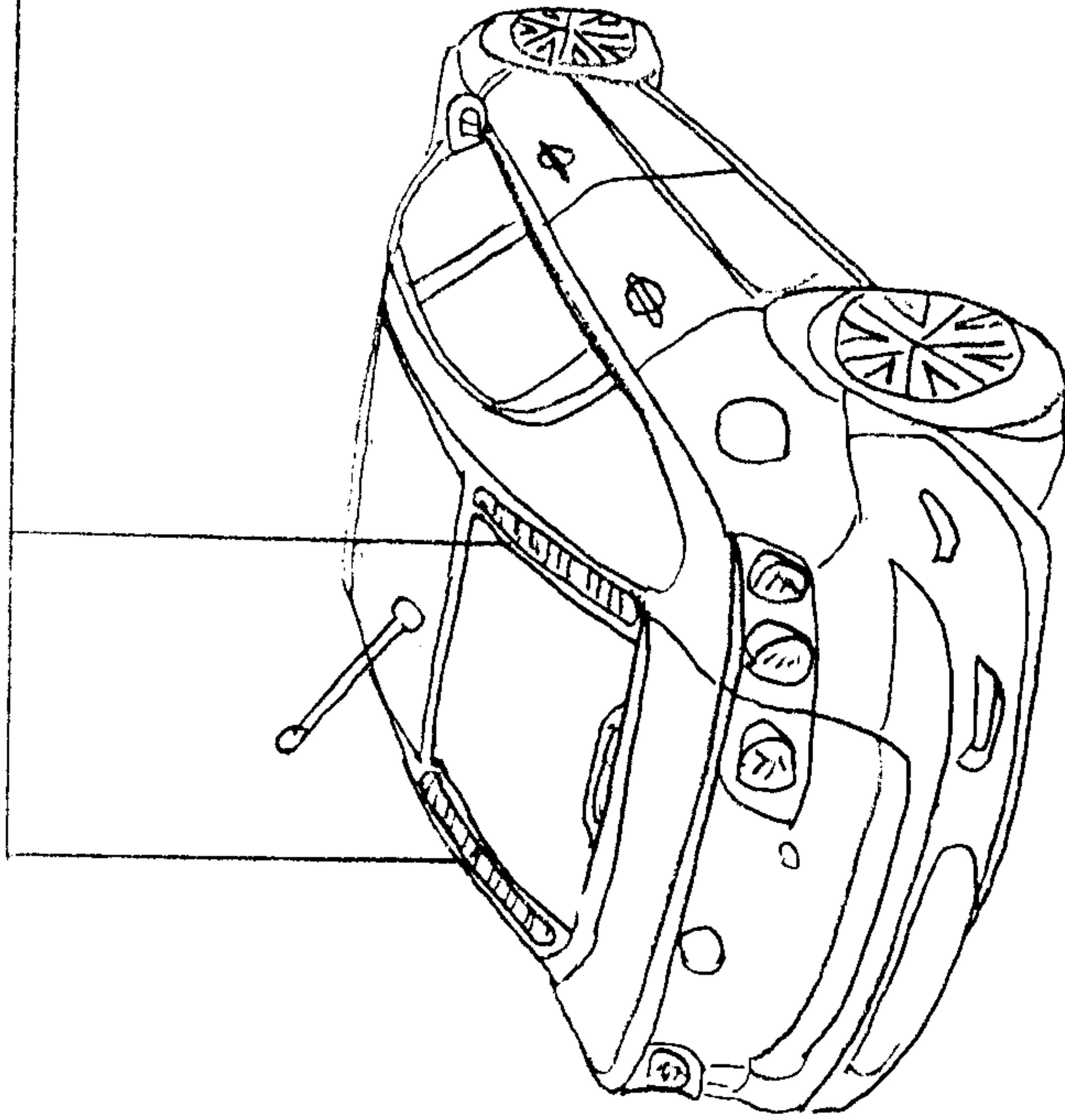
Structure of the new type rear speed lights (upright)

speed (km/h)



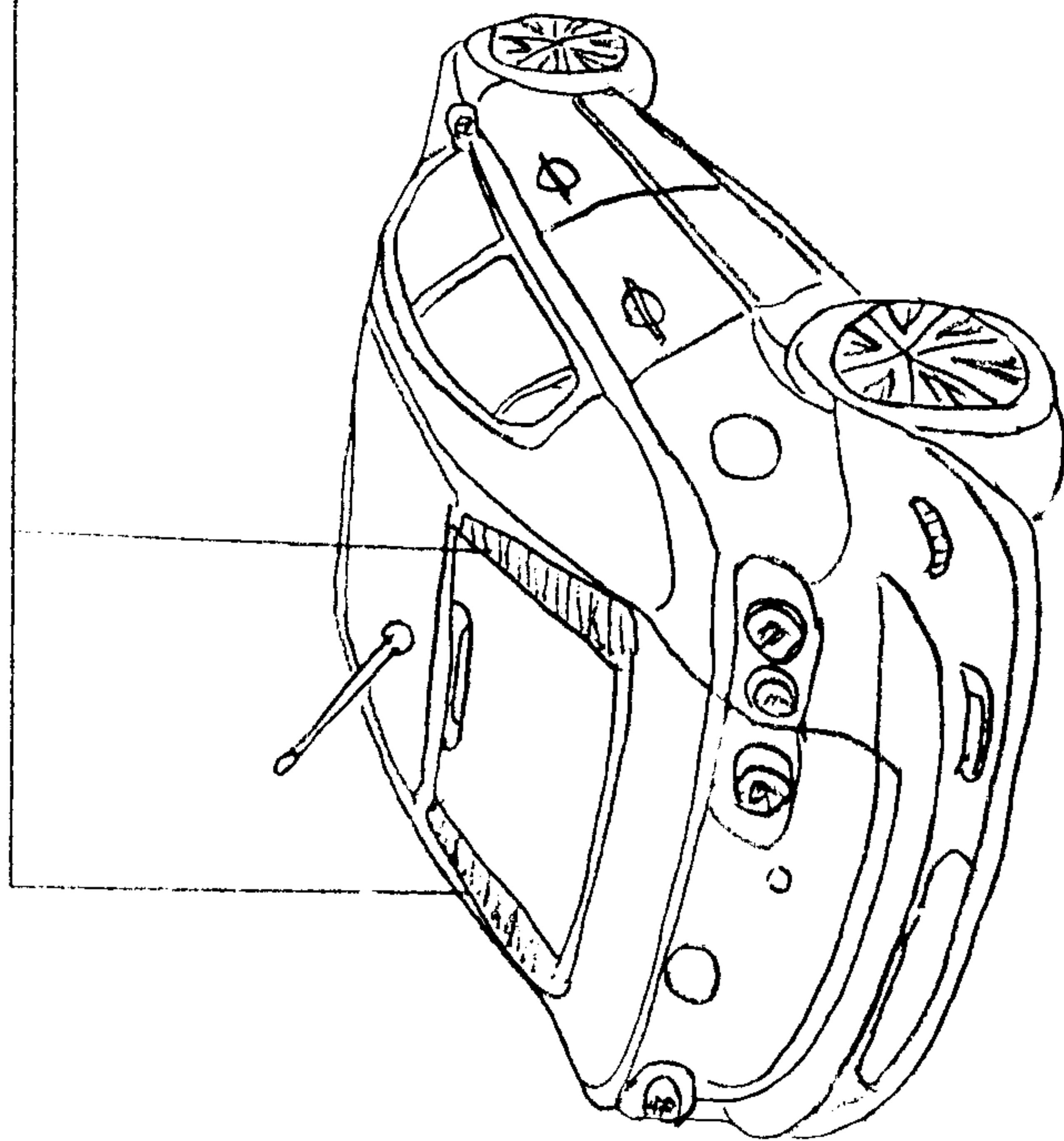
Drawing B-1

Rear speed lights
at the both sides
of the rear window



Drawing B-2

Rear speed lights
at the sides of
the rear window
(trapezoid or
triangle)



Rear speed lights
in the center interior
of the rear window

