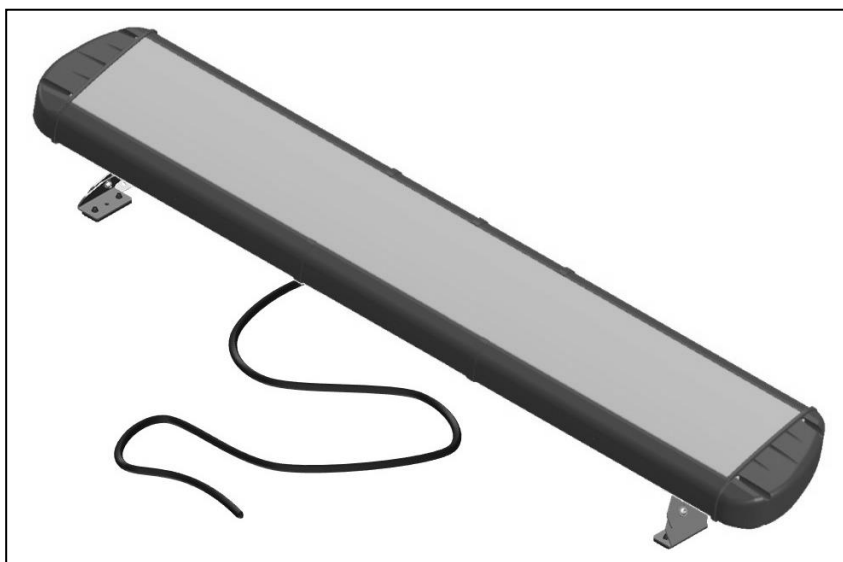


VEGA LIGHTBAR TECHNICAL GUIDE

WITHOUT SIREN, WITHOUT ROOF CONNECTOR



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WARNING CONCERNING THE MOUNTING OF MERCURA'S EQUIPMENT

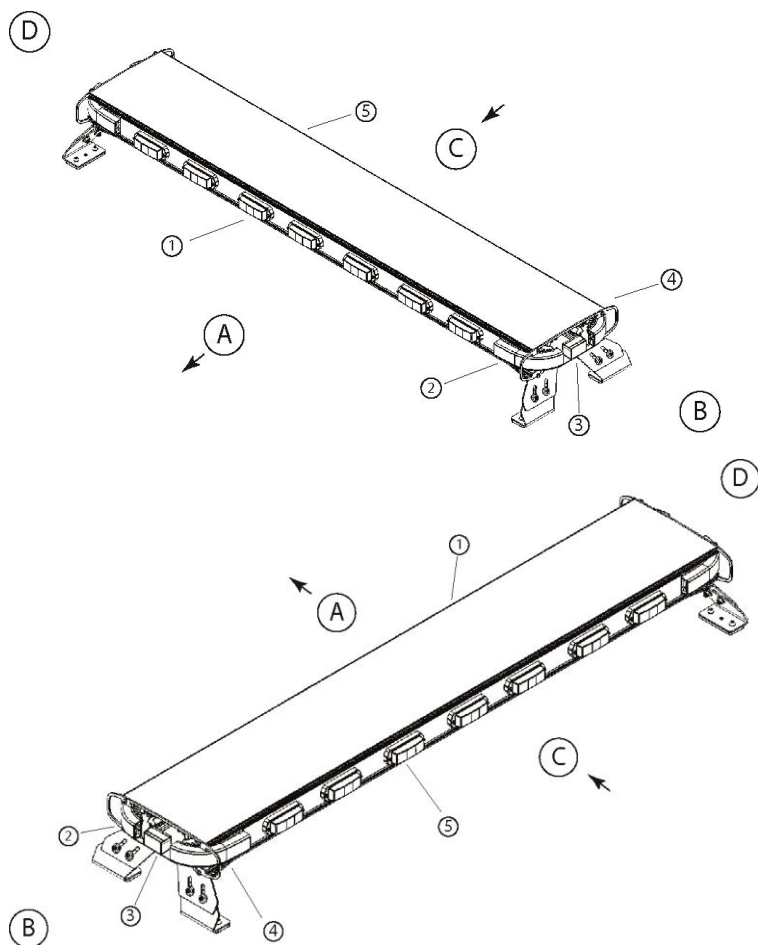
The installer is fully responsible for the mounting of equipment on a vehicle.

The installer must define the means and the material necessary for mounting of equipment in order to deliver the vehicle equipped according to the regulations.

MERCURA is not responsible for failures occurring due to incorrect definition of the type of mounting system, reinforcements, drilling holes in roof panel, state and quality of mounting system, use of vehicle manufacturer anchoring points and the system power supply and protection definition in accordance with the vehicle energy source.

1. LIGHT MODULE POSITION (DEPENDING ON VERSION)

View of a VEGA light bar without lenses



- A. Front
- B. Lateral left
- C. Rear
- D. Lateral right

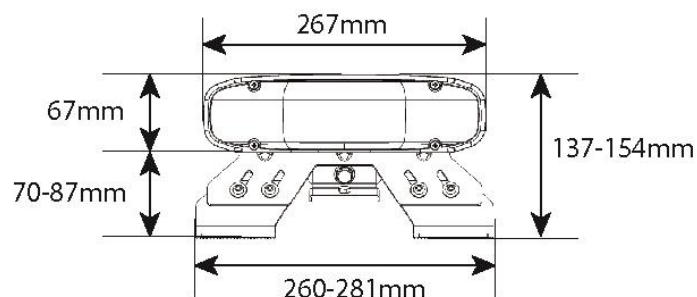
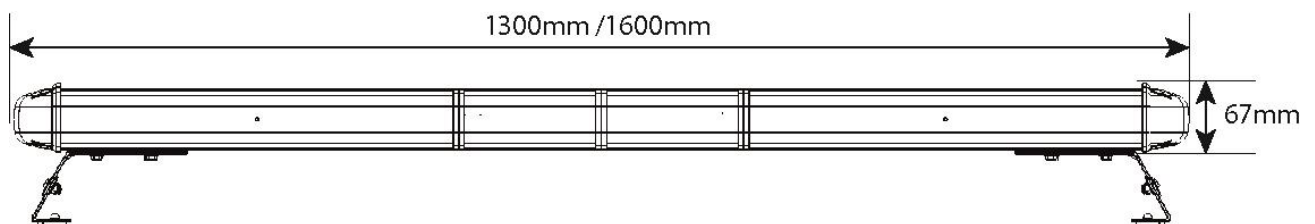
- 1. Front modules
- 2. Front corner lights
- 3. Alley lights
- 4. Rear corner lights
- 5. Rear modules

2. AVAILABLE VERSIONS

Length	Corner module colour	Front	Rear	Alley lights	Light Module Configurations	Item N°
1300	Blue	x	x	x		28543
1600						28544
1300	Blue	Blue	x	x		28545
1600						28546
1300	Blue	Blue	Blue	x		28547
1600						28548
1300	Blue	Blue	Amber	Yes		28549
1600				x		28550

Length	Corner module colour	Front	Rear	Alley lights	Light Module Configurations	Item N°
1300	Blue	x	Amber	x		28551
1600						28552
1300	Amber	x	x	x		28553
1600						28554
1300	Amber	Amber	Amber	x		28557
1600						28558

3. DIMENSIONS



4. WEIGHT ACCORDING TO VERSION

Item N° 28543	Item N° 28544	Item N° 28546	Item N° 28547	Item N° 28549	Item N° 28552	Item N° 28553	Item N° 28554	Item N° 28557	Item N° 28558
12,14kg	14,44kg	14,74kg	13,04kg	13,73kg	14,74kg	12,14kg	14,44kg	13,04kg	15,04kg

5. ELECTRICAL CHARACTERISTICS

POWER SUPPLY: 10-30 volts

CONSUMPTION

Flash Mode

- 6.3A peak at 13.5 volts / 3.2A peak at 27 volts
- 2.2A average at 13.5 volts / 1.3A average at 27 volts

Cruise Mode

- 2.7A peak at 13.5 volts / 1.2A peak at 27 volts
- 0.6A average at 13.5 volts / 0.3A average at 27 volts

Left and Right Alley lights: 1A at 13.5 volts / 0.65A at 27 volts

Amber traffic director lights

Flash Mode

- 2.1A peak at 13.5 volts / 1.3A peak at 27 volts
- 1.1A average at 13.5 volts / 0.7A average at 27 volts

Left scrolling mode

- 0.6A peak at 13.5 volts / 0.4A peak at 27 volts
- 0.35A average at 13.5 volts / 0.25A average at 27 volts

Right scrolling mode

- 0.6A peak at 13.5 volts / 0.4A peak at 27 volts
- 0.35A average at 13.5 volts / 0.25A average at 27 volts

Scrolling mode – interior towards exterior

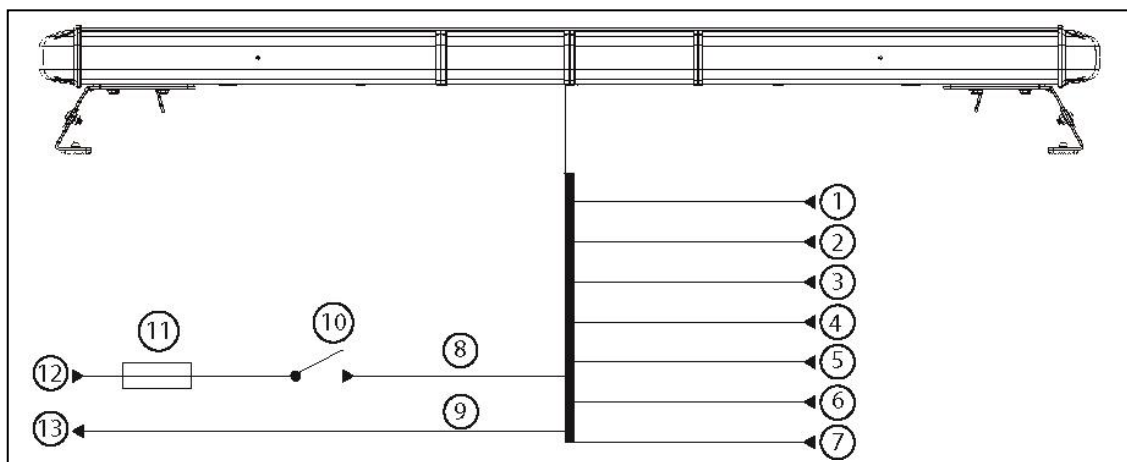
- 0.9A peak at 13.5 volts / 0.6A peak at 27 volts
- 0.5A average at 13.5 volts / 0.35A average at 27 volts

Full flash with alley lights and amber flashing traffic director bar

- 9.8A peak at 13.5 volts / 5A peak at 27 volts
- 4.3A average at 13.5 volts / 2.3A average at 27 volts

6. WIRING

Each function is powered via the « + Battery » to the associated wire colour.
The lightbar power supply and the functions are activated by the « + » Battery command via switches or a MERCURA CCS CAN electronic system, which are not supplied.



For amber and blue lightbars with amber traffic director lights:

1. Blue wire: **Interior- Exterior** scrolling of rear amber lights
2. Purple wire: **Right** scrolling of rear amber lights
3. Green wire: **Left** scrolling of rear amber lights
4. Yellow wire: **Warning pattern** for rear amber lights
5. White wire:
 - a. Amber lightbars: **Flash mode** for outer Ø 0.5mm² lights
 - b. Blue lightbars: **Left and Right projector** Ø 0.5mm²
6. Orange wire: **Cruise Mode** for Ø 0.5mm² lightbar lights
7. Brown wire:
 - a. Amber Lightbar: **Flash** mode for lightbar modules with rear Ø 0.5mm² lights
 - b. Blue Lightbar: **Flash** mode for lightbar modules (except rear amber Ø 0.5mm² lights)
8. Red wire: Lightbar power supply cable
9. Black wire: Lightbar ground cable
10. Lightbar control switch (Not supplied)
11. Fuse (Not supplied) – choice of fuse to be correctly adapted to the lightbar
12. Power supply « + » Battery
13. Battery ground.

For all blue lightbars the power supply wiring and commands are:

1. Blue wire: **Flash Mode** for lightbar lights
2. Yellow wire: **Cruise Mode** for lightbar lights
3. Red wire: Lightbar power supply cable
4. Black wire: Lightbar ground cable

WARNING!

The wiring diagram shows all the available wires for a full option lightbar.
Some wires will therefore be missing on certain versions.

7. SPECIFIC FUNCTIONS

Concerning the functioning, it is important to note the following points:

Flash Mode/Cruise Mode

Note: The « Cruise » mode enables the activation of the lightbar modules in steady burn at a lower brightness (pilot light).

To activate the « Cruise » mode, the « Flash » mode must be deactivated beforehand.

When the lightbar is in « Cruise » mode, it is not necessary to deactivate the « Cruise » mode to change to « Flash » mode. However, when the lightbar is in « Flash » mode, its deactivation will automatically change the mode to « Cruise ».

Lightbar with all blue lights (29224, 29225, 29226, 29227, 29228, 29229)

In the Flash mode all the blue lights flash at the same time.

Scrolling for lightbars with rear amber warning lights

4 «Scrolling» functions are available for lightbars with rear amber warning lights.

1. All modules flash simultaneously (Warning)
2. Left Scrolling
3. Right Scrolling
4. Interior-Exterior Scrolling Mode

Changing from the scrolling mode to the « Flash » mode does not require deactivation of the scrolling beforehand. However, the deactivation of the « Flash » mode will automatically change the mode to the one previously active.

However, it is important to deactivate « Flash » mode before activating another scrolling mode.

If the bar is in one scrolling mode, activating another mode without deactivating the previous one will automatically activate the scrolling bar to the « Flash » mode.

8. MOUNTING INSTRUCTIONS

Pre-wire the VEGA lightbar before mounting it on the vehicle, to ensure that it is correctly wired and functions correctly.



During this pre-wiring procedure make sure to **identify** the **front** and the **rear** of the lightbar to ensure the correct mounting.

For lightbars with amber traffic director lights, the amber scrolling can be found to the rear of the lightbar (Scrolling to left, scrolling to right, flashing warning lights).

Identify the required position for the roof connector on the vehicle panel.

On all blue lights VEGA lightbars (ref 28548/28547 version without roof connector), there is no difference between the front and the rear of the lightbar as the lights function symmetrically.

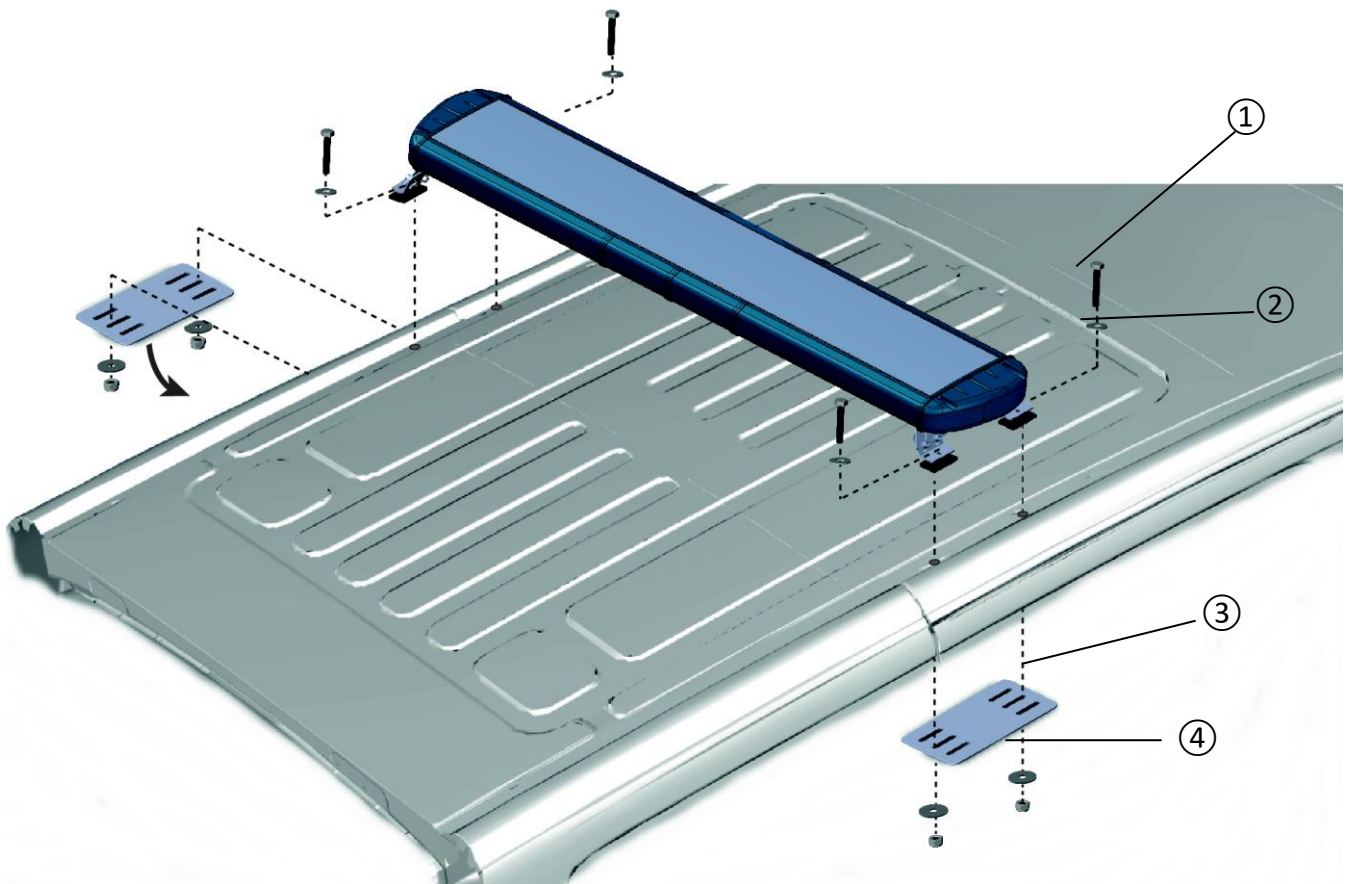
8. FIXING SYSTEM

The light bar is delivered with a standard mounting system to enable easy installation on the vehicle roof panel. The mounting kit includes

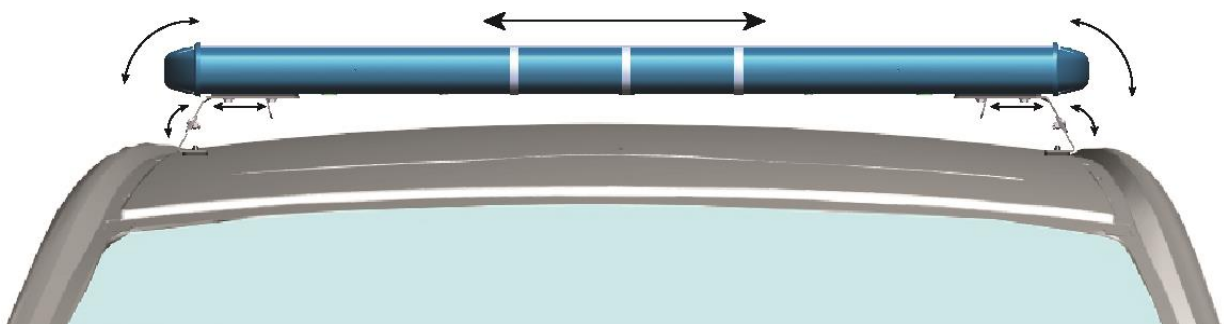
- 4 x M6-30 screws
- 4 x Ø16 Int7 ep11 washers
- 4 x H 6 type locking nuts
- 2 x reinforcement plates

WARNING

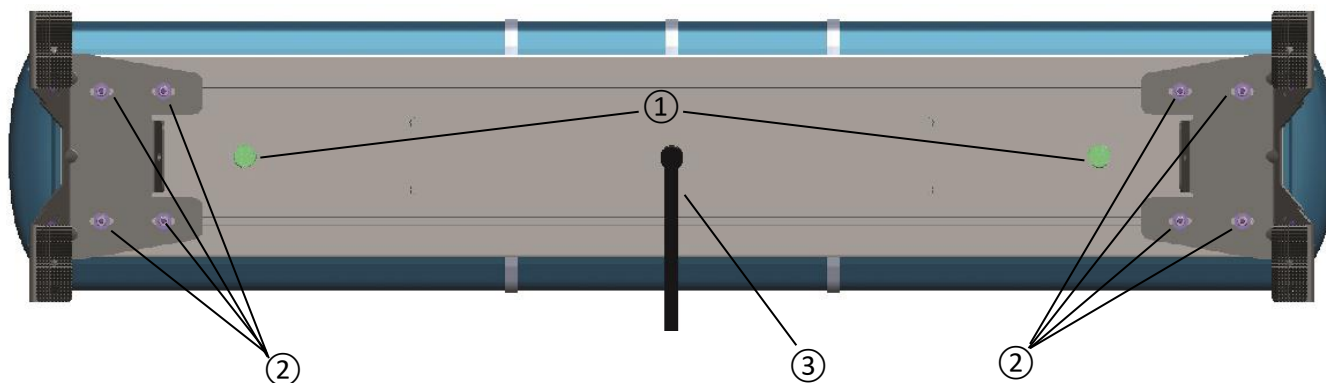
The holes drilled on the roof panel must have an anti-corrosion and a sealant surface treatment, using the appropriate products adapted to the roof panel material (not supplied).



1. M6-30 screw
2. Ø16 Int7 ep11 washer
3. Reinforcement plate
4. H 6 type locking nut

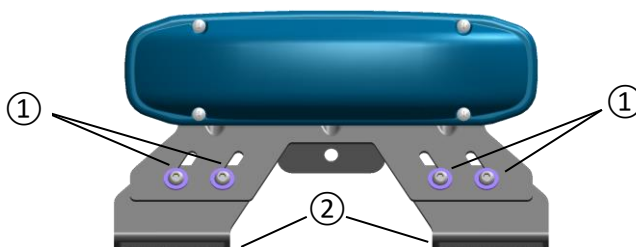
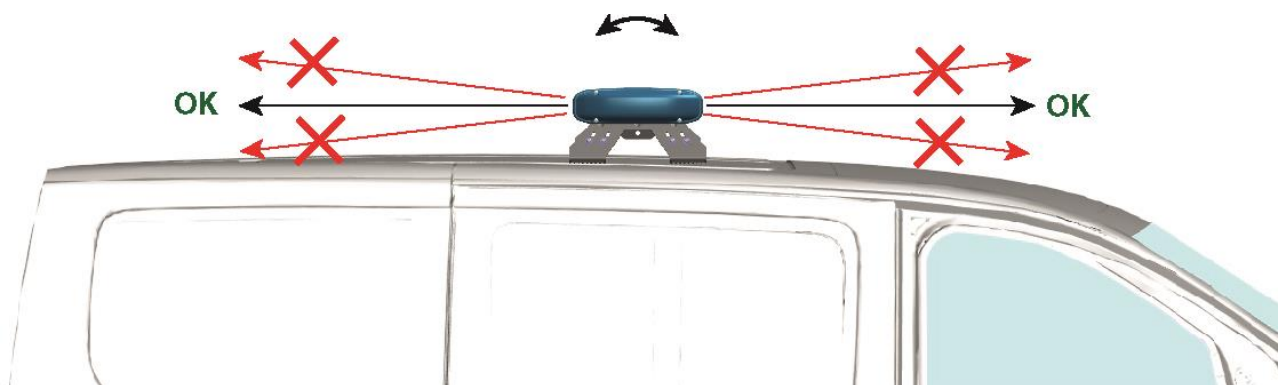


VEGA lightbar – view from below



1. Air vents: Never plug or cover
2. Lightbar wiring loom
3. Lightbar mount fixing screws

The fixing screws enable levelling of the lightbar on the vehicle's roof.



1. Mounting base fixing screws
2. Rubber base protection

The fixing screws enable the adjustment angle of the lightbar position.

Tighten the lightbar base screws with 3NM torque