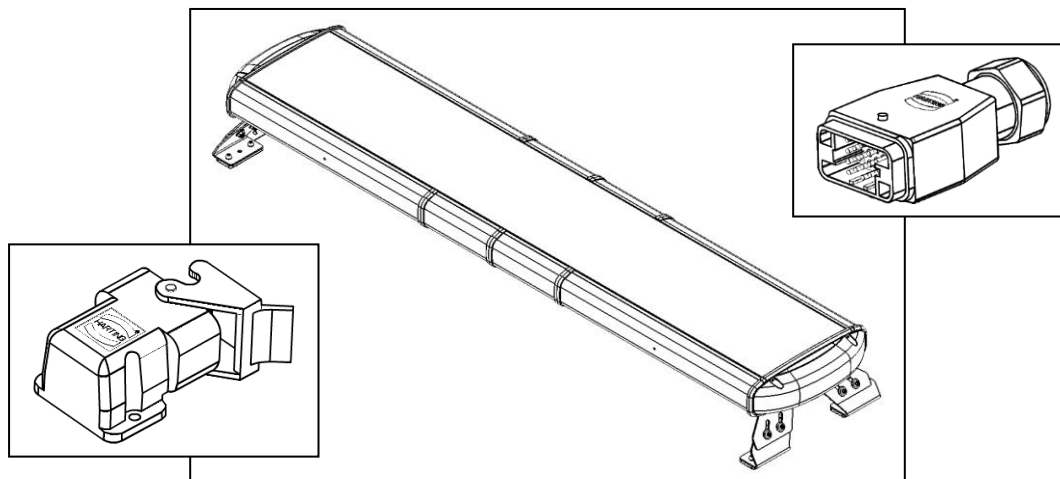


TECHNICAL GUIDE VEGA LIGHTBAR without Siren with Roof Connector



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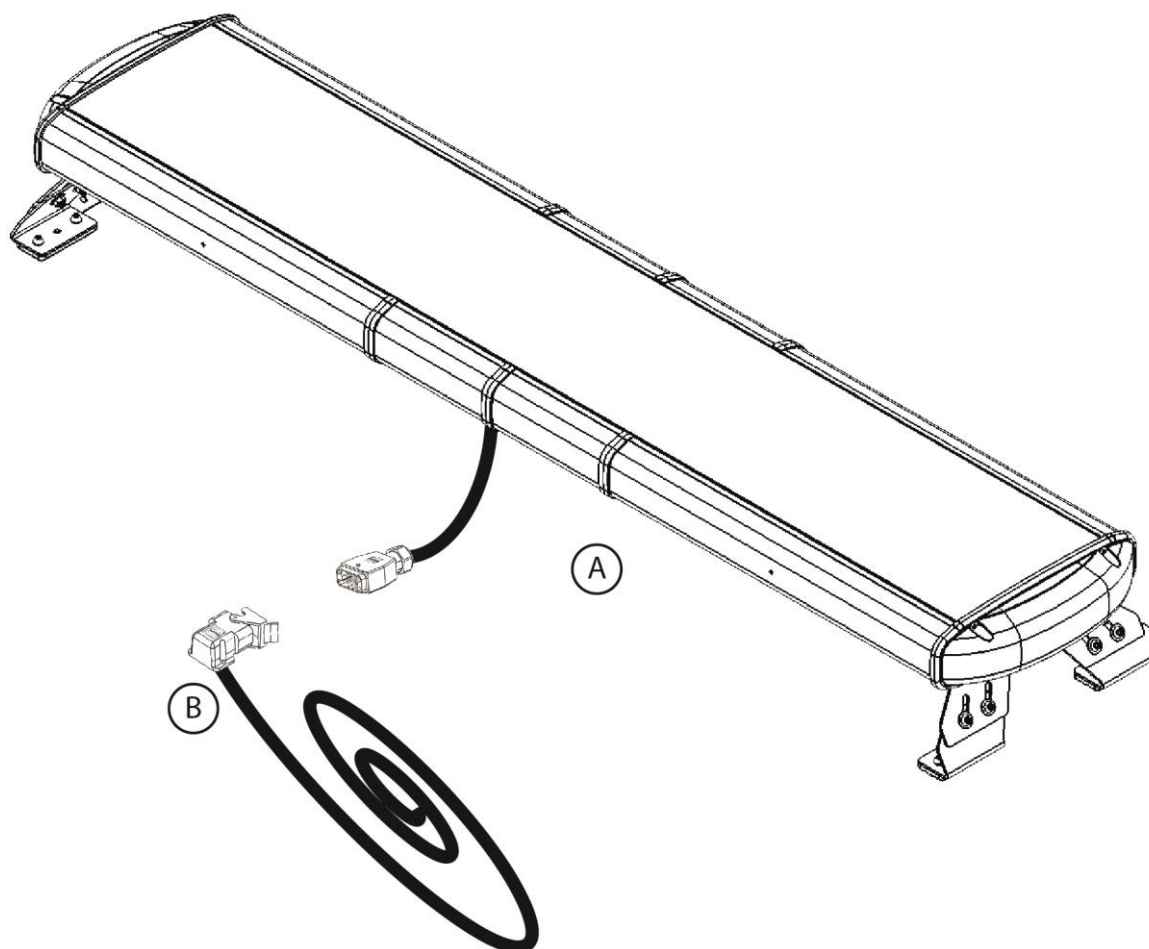
WARNING CONCERNING THE MOUNTING OF MERCURA'S EQUIPMENT

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.

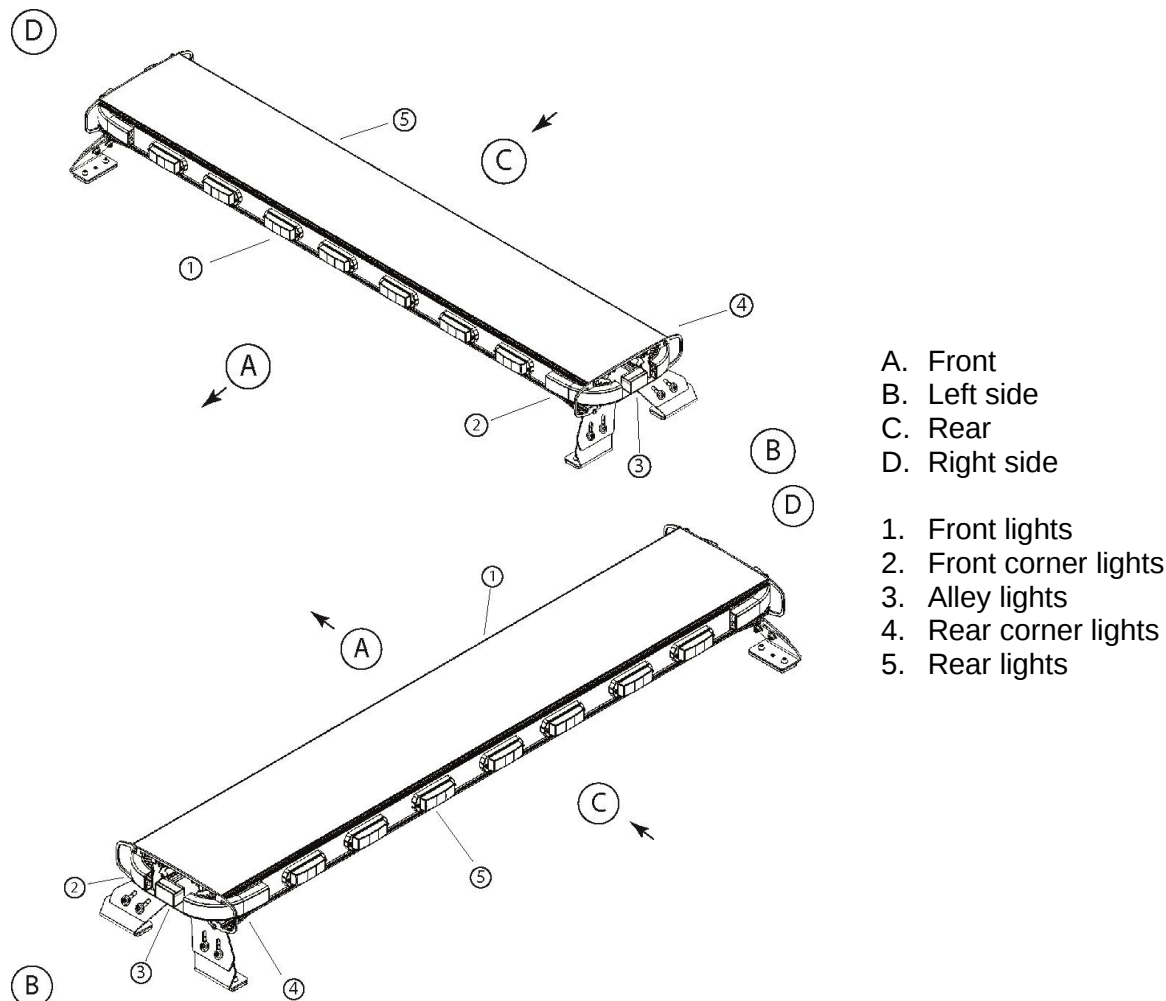
1. KIT COMPOSITION



- A. VEGA lightbar with 18-pin connector and adjustable mountings
- B. Vehicle's harness with 18-pin connector

2. LIGHT MODULE POSITION (DEPENDING ON VERSION)

View of a VEGA light bar without lenses

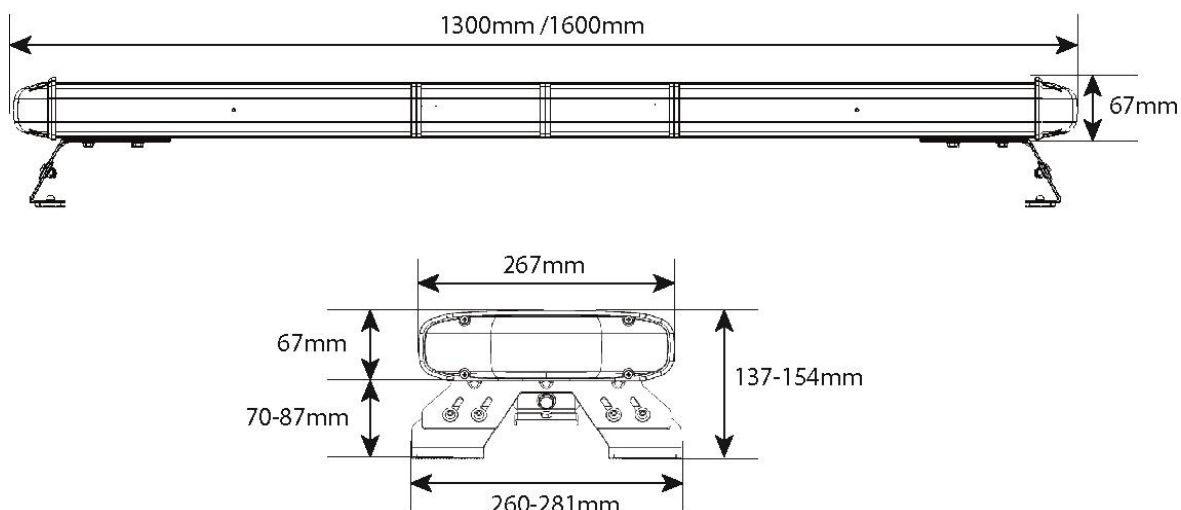


3. AVAILABLE VERSIONS

Length	Corner module colour	Front	Rear	Alley lights	Light Module Configurations	Reference
1300	Blue	x	x	x		29224
1600						29225
1300	Blue	Blue	x	x		29226
1600						29227
1300	Blue	Blue	Blue	x		29228
1600						29229
1300	Blue	Blue	Amber	Yes		29230
1600				x		29231

Length	Corner module colour	Front	Rear	Alley lights	Light Module Configurations	Reference
1300	Blue	x	Amber	x		29232
1600						29233
1300	Amber	x	x	x		29234
1600						29235
1300	Amber	Amber	Amber	x		29236
1600						29237

4. DIMENSIONS



5. WEIGHT ACCORDING TO VERSION

REFERENCES									
29224	29225	29227	29228	29230	29233	29234	29235	29236	29237
12.14kg	14.44kg	14.74kg	13.04kg	13.73kg	14.74kg	12.14kg	14.44kg	13.04kg	15.04kg

6. 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

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 RECOMENDATIONS

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



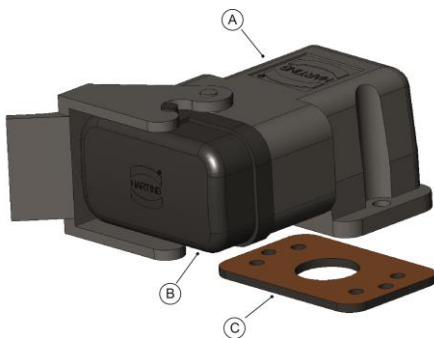
During this pre-wiring procedure make sure to **identify** the **front** and the **rear** of the lightbar to avoid any mistakes in mounting.

For lightbars with amber warning lights, the amber scrolling can be found in the rear of the lightbar (Left Scrolling, Right Scrolling, flashing «warning» lights).

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

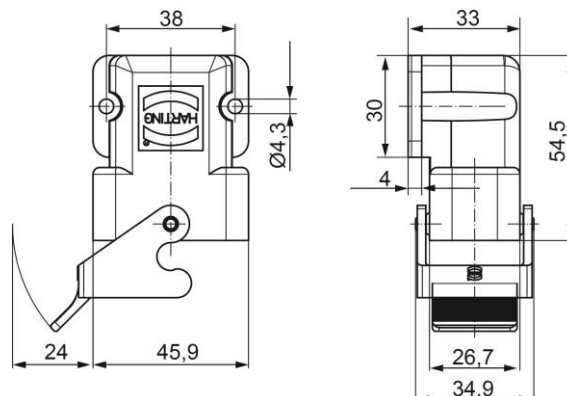
On all blue lights VEGA lightbars (ref 29228/29229), there is no difference between the front and the rear of the lightbar as the lights function symmetrically.

9. 18-PIN ROOF CONNECTOR

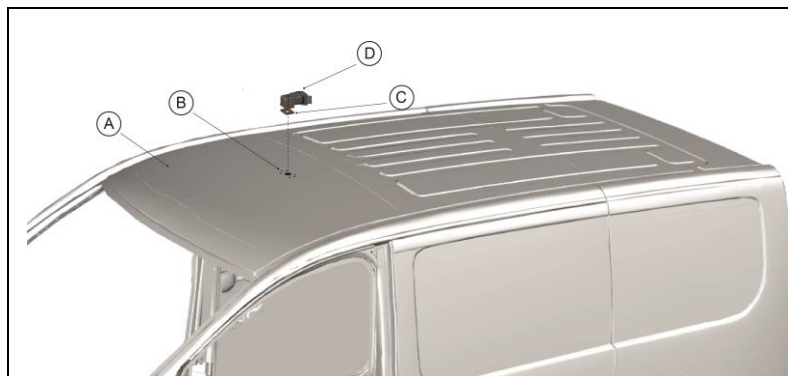


- A. Roof connector base
- B. Protective cap of the roof connector
- C. Roof connector gasket

9.1. BASE DIMENSIONS



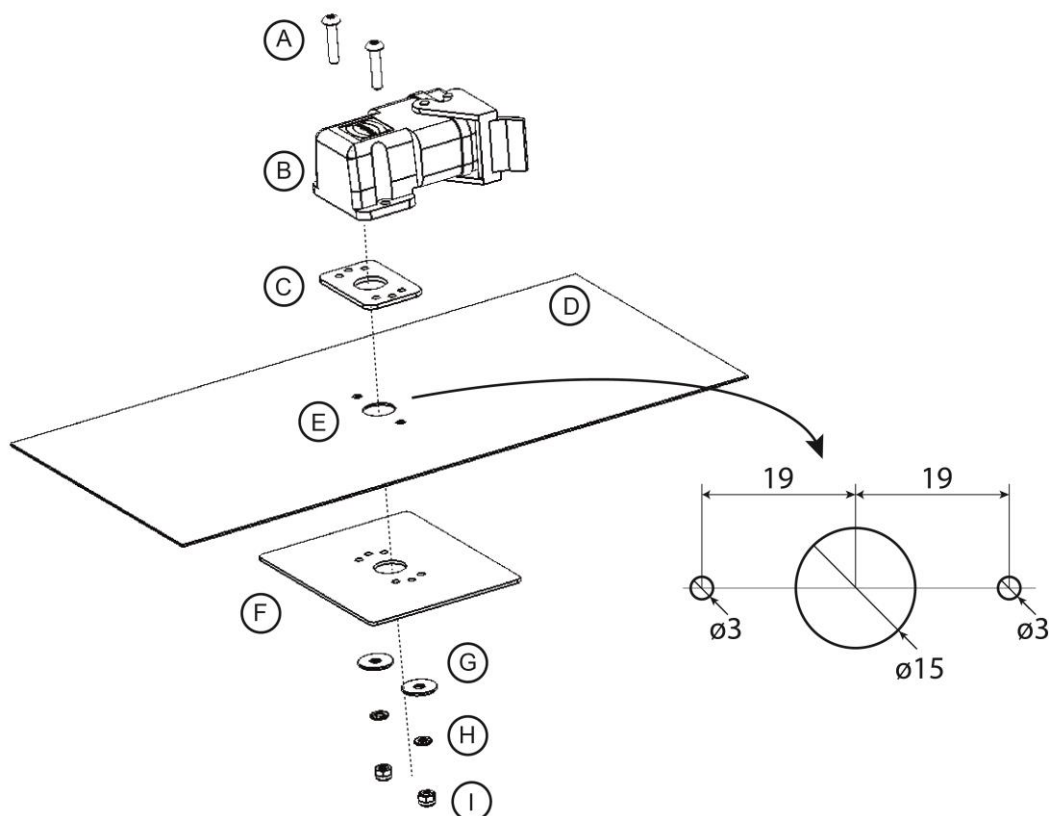
9.2. ROOF MOUNTING



- A. Vehicle's roof
- B. Vehicle's 2 drilling points
- C. Roof connector gasket
- D. 18-point roof connector bas

9.3. ROOF DRILLING DIAGRAM

2 fixing points



- A. 2 base fixing screws
- B. 18-point Harting base
- C. Roof connector gasket
- D. Vehicle's roof
- E. Roof drilling (refer to the template)
- F. Plate
- G. 2 inox washers
- H. 2 star washers
- I. 2 locking nuts

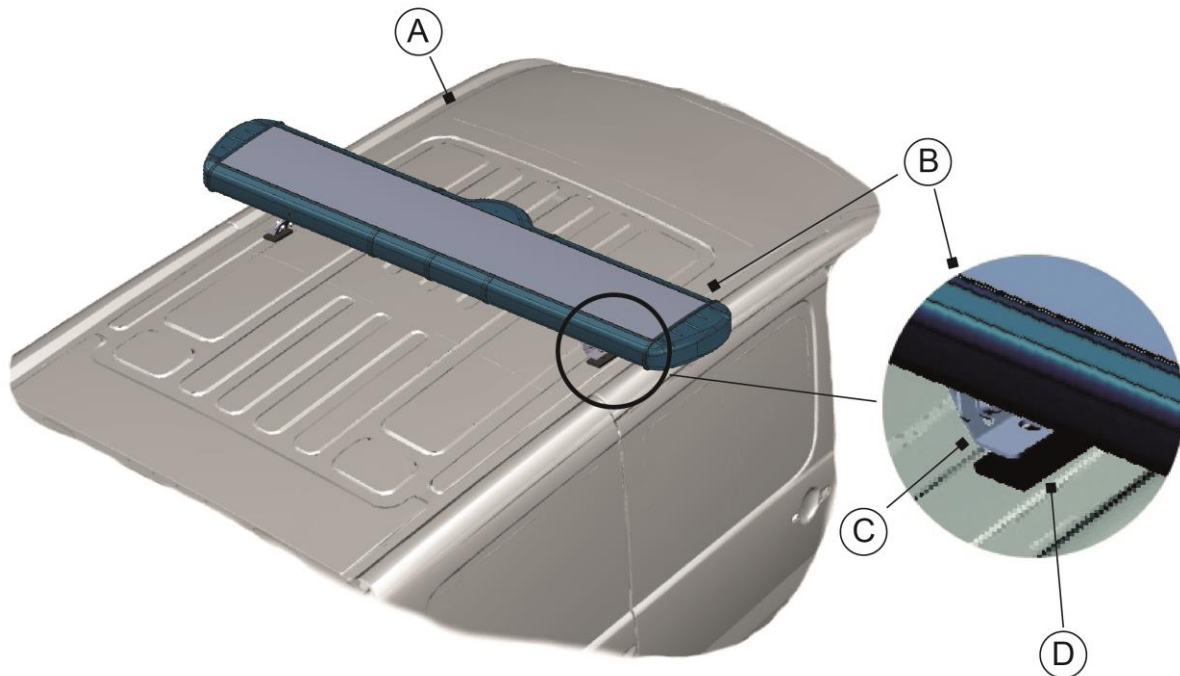
10. MOUNTINGS

The lightbar is provided with a standard mounting system to enable easy installation on the vehicle's roof panel. The mounting kit includes

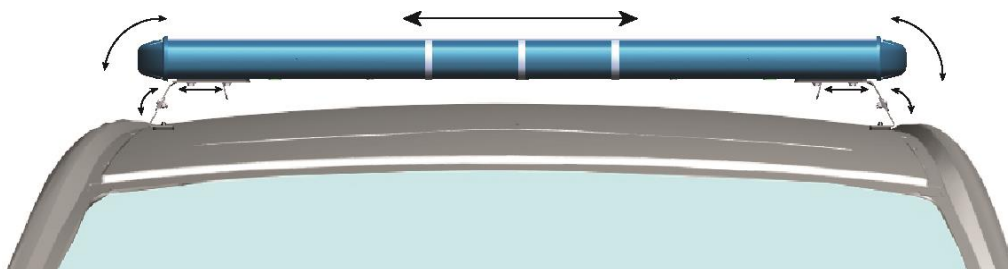
- 4 x M6-30screws
- 4 x Ø16 Int7 ep11washers
- 4x H6type locking nuts
- 2 x reinforcement plate

ATTENTION

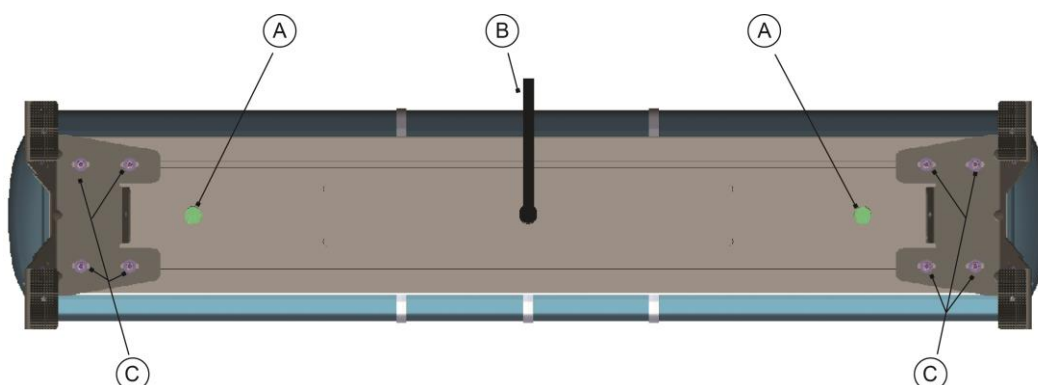
The holes drilled on the roof panel must have an anti-corrosion and a sealant surface treatment, using the appropriate products adapted to the roof panel material (not supplied).



- A. M6-30screw
- B. Ø16 Int7 ep11washers
- C. Reinforcement plate
- D. H 6type locking nut

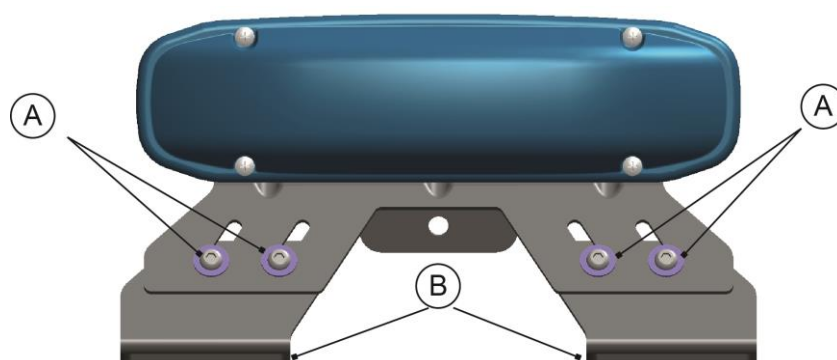
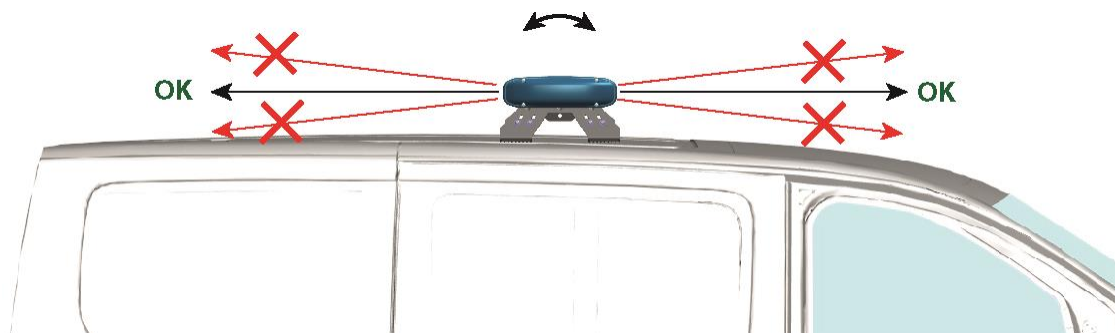


VEGA lightbar – view from below



- A. Air vents: Never plug or cover
- B. Lightbar mount fixing screws
- C. Lightbar wiring loom

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



1. Mounting base fixing screws
2. Rubber base protection

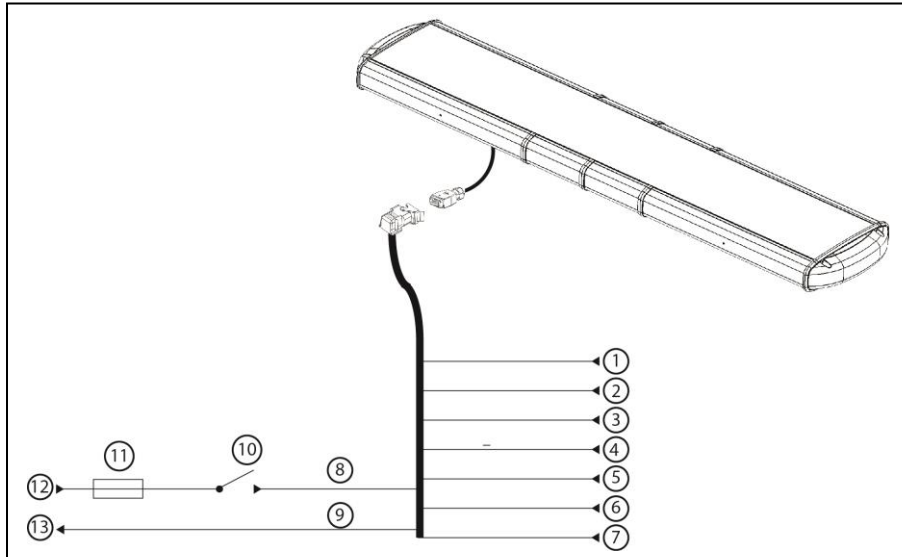
The fixing screws enable the adjustment angle of the lightbar position.

Tighten the fixing screws on the base of the lightbar with 3Nm torque

11. WIRING DIAGRAM

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. They are not supplied – so are proposed as an option.



For amber lightbars and blue lightbars with traffic director lights:

1. Blue wire: **Exterior scrolling** of rear amber Ø 0.5mm² lights
2. Purple wire: **Right scrolling** of rear amber Ø 0.5mm² lights
3. Green wire: **Left scrolling** of rear amber Ø 0.5mm² lights
4. Yellow wire: **Warning pattern** for rear amber Ø 0.5mm² lights
5. White wire:
 - a. Amber lightbars: **Flash mode** for outer Ø 0.5mm² lights
 - b. Blue lightbars: Left and right Ø 0.5mm² alley lights
6. Orange wire: **Cruise Mode** for Ø 0.5mm² lights
7. Brown wire:
 - a. Amber lightbars: **Flash mode** for lightbar modules with rear Ø 0.5mm² lights
 - b. Blue lightbars: **Flash mode** for lightbar modules (except rear amber Ø 0.5mm² lights)
8. Red wire: Lightbar power supply Ø 2.5mm² cable
9. Black wire: Lightbar ground Ø 2.5mm² 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 Ø 0.5mm² lights
2. Yellow wire: **Cruise Mode** for lightbar Ø 0.5mm² lights
3. Red wire: Lightbar power supply Ø 2.5mm² cable
4. Black wire: Lightbar ground Ø 2.5mm² cable

WARNING!

The following wiring diagram shows all the available wires for a full option lightbar. Some wires are unused on some versions. It is therefore important to isolate them.