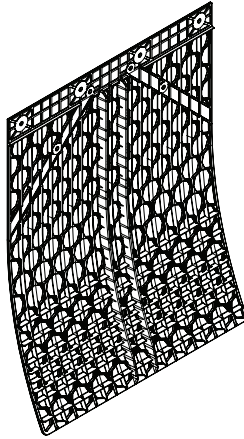




# OPTIFLOW™ FLAP INSTALLATION INSTRUCTION

TP2311  
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## Installation instruction



### SAFETY INFORMATION

#### Provisions for a safer work environment:

- Only trained and qualified automotive technicians should carry out work on the vehicles.
- Read this publication carefully.
- Follow all warnings, notices and instructions to help avoid personal injury and property damage.
- Always abide by the vehicle manufacturer's specifications and instructions.
- Observe all accident regulations of the repair facility as well as regional and national regulations.
- The workplace should be dry, sufficiently lit and ventilated.
- Use personal protective equipment if required (safety shoes, protective goggles, respiratory protection and ear protectors).

#### WARNING

To help prevent serious eye injury, always wear eye protection when you perform vehicle maintenance or service.

#### WARNING

Park the vehicle on a level surface. Block the wheels to help prevent the vehicle from moving. Support the vehicle with safety stands. Do not work under a vehicle supported only by jacks. Jacks can slip or fall over. Serious personal injury and damage to components can result.

### Service and Product Information

If you have any questions about the material covered in this publication, or for more information about the WABCO product line, please contact WABCO Customer Care Center at 844-REACH ZF, by email at [NAcustomer care.zf@zf.com](mailto:NAcustomer care.zf@zf.com) or visit our website: [www.zf.com/cv](http://www.zf.com/cv).

Visit our Literature Center at <https://zfcvliterature.com/> to access and download additional information.

### WARRANTY INFORMATION

Visit ZF's CVS North America website for Warranty terms and conditions of your model year.



OptiFlow™ flap  
warranty

### REQUIRED TOOLS

The following tools are recommended:

- Socket wrench
- 1/2" socket
- 1/2" wrench

### INITIAL STEPS

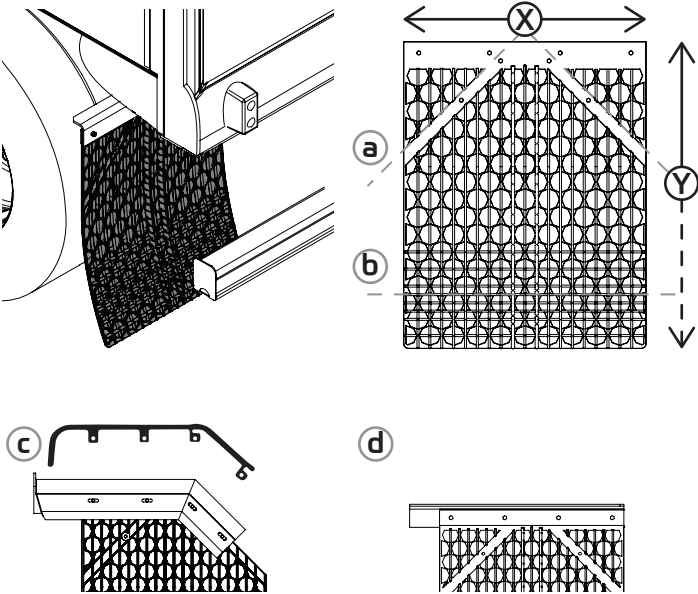
Before starting the installation, make sure:

- Prior to installation make sure the hanger profile is straight and ready to receive the flap.
- The flap shape & dimensions fit the holding profile.
- The flap width matches either dual or wide base tire configuration width present on the vehicle.
- Flaps are directional. Left and right side variants of the flap will be necessary when angle cut PN's are chosen.
- When replacing the mudflaps, use the recommended hardware and specified forces recommended by the vehicle manufacturer.

# PART NUMBERS & DIMENSIONS

PART NUMBER	SIZE	DESCRIPTION	WEIGHT [kg]
1841510024	24"x 30"	Aero Mudflap 30" straight	1.642
1841510034	24"x30"	Aero Mudflap 30" angled RH	1.513
1841510044	24"x 30"	Aero Mudflap 30" angled LH	1.513
1841510074	24"x 28"	Aero Mudflap 28" straight	1.548

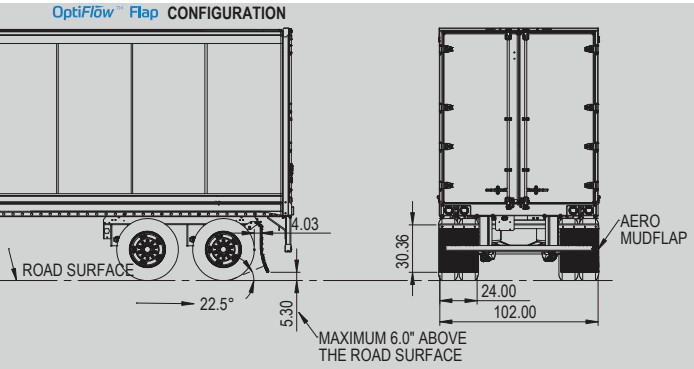
Variants are available to meet different use cases, and to fit mount bar type, spring loaded or longitudinal trailer mounting profiles. In the (left) image below is an example of an installation on a longitudinal profile. In the opposite image (right) is a schematic of the dimensions that change across all variants where (X) is the horizontal and (Y) the vertical dimension according the table above. Cutting line (a) is meant to allow for adjustment on different bar and spring loaded hangers. Line (b) determines variants that are shorter in Y.



## INFORMATION

Flaps should offer antispray, antisail features while providing complete coverage to the tires they are serving. Make sure the allowed offset from the tire axle and from the ground are given ahead of the flap installation.

The image bellow shows a proper installation of OptiFlow™ flap.

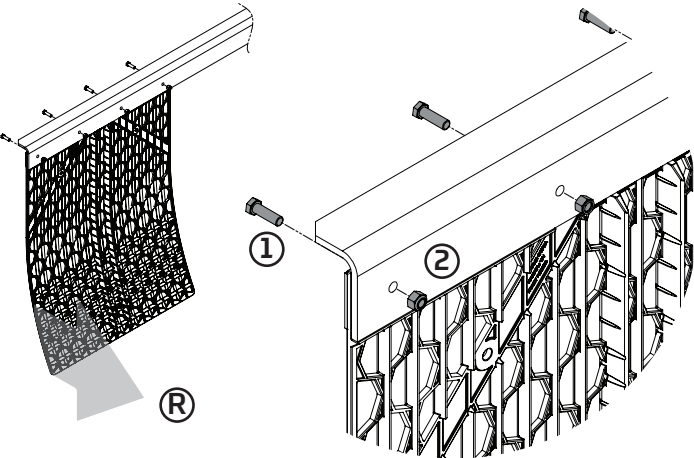


# INSTALLATION

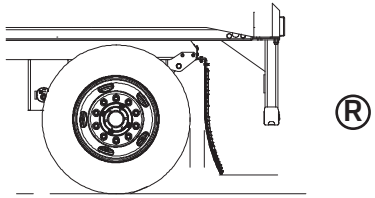
In the table bellow an example of commonly used hardware for [x2] mudflaps installations. For replacement of flaps, use the exact hardware originally installed, e.g. washers. Additionally, replicate the force requirements when fastening the hardware for the device.

ITEM	DESCRIPTION	QUANTITY
1	Hex bolt 5/16 - 18 X 1" , SS	8
2	Nylock hex nut 5/16 - 18, ZINi Alloy	8

- Once the flap is placed into position make sure support holes align.
- Flaps are directional, place the device's curvature pointing to the rear of the vehicle (R).
- Use bolts (1) to position and pass them through making sure these are not tightened directly against the flap. If the hanger does not sandwich the flap between two metal flanges, you may need to use washers.



- Place item ② and fasten all hardware. Tighten to a torque of 11lb-ft.

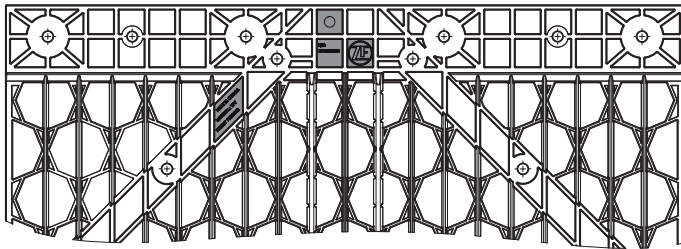


- After mounting, verify the flaps meet the legally required offsets from ground, tire and width; as specified in the applicable legislation.

#### **⚠ WARNING**

Flaps are directional, place the device's curvature pointing to the rear of the vehicle (R).

## **IDENTIFY A MUDFLAP**



Embossed at the back of each flap there are four fields of information that can be required in case of replacement, manufacturing, traceability or authenticity:

- Date wheel
- Part Number
- ZF brand marking
- Manufacturing information

ZF CV Systems North America  
LLC  
1220 Pacific Drive  
Auburn Hills, MI 48326  
[www.zf.com/cv](http://www.zf.com/cv)

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