

VERUS ENGINEERING

Mk3 Focus RS Rear Diffuser

Install Manual



Author: Eric Hazen
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Approvals: E. Hazen, P. Lucas

Document Revisions

Rev	Date	Author	Description
01	2017/01/21	E. Hazen	Initial release of install manual.
02	2017/08/08	P. Lucas	Company name change from Velox to Verus

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Mk3 Focus RS Rear Diffuser Install

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Mk3 Focus RS Rear Diffuser Install

1. Introduction

1.1. Overview: Detailed instructions on installing the Verus Engineering functional rear diffuser for the Mk3 Focus RS.

1.2. Difficulty: Beginner

1.3. Time Required: 1-1.5 hours

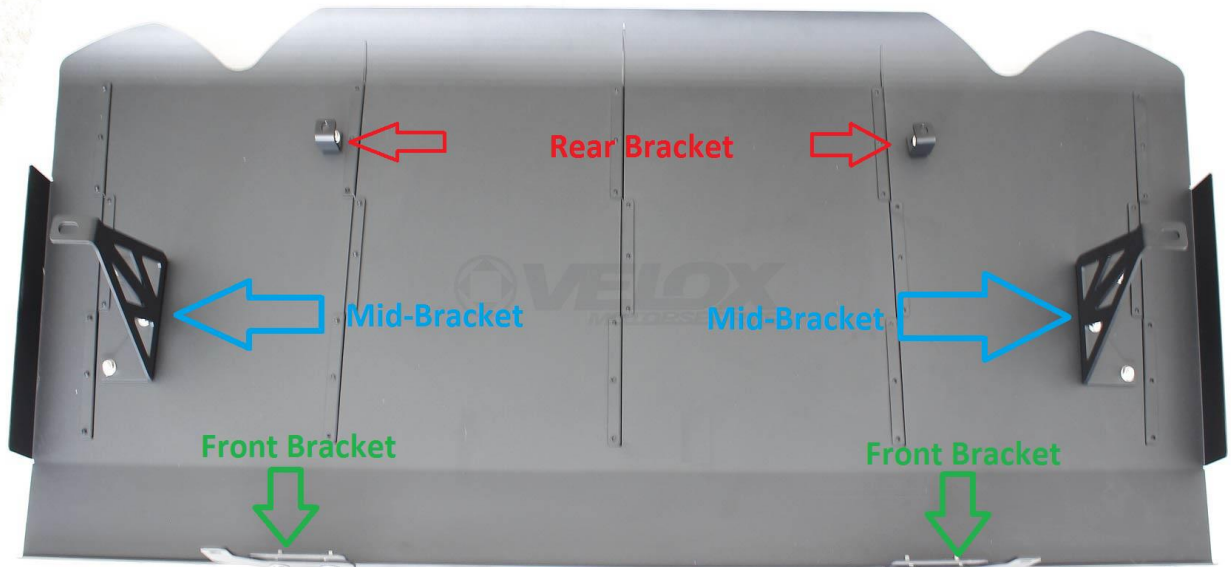
1.4. Tools Needed:

- 1.4.1. Jack and Jack Stands (or a lift)
- 1.4.2. 13mm Socket
- 1.4.3. 10mm Socket
- 1.4.4. Ratchet
- 1.4.5. Extension(s)
- 1.4.6. 4mm Allen wrench or socket
- 1.4.7. 8mm Wrench
- 1.4.8. 10mm wrench
- 1.4.9. Level

1.5. Rear Diffuser Components:

- 1.5.1.** Rear Diffuser
- 1.5.2.** (2) Front Brackets
- 1.5.3.** (2) Mid-Brackets
- 1.5.4.** (2) Rear Brackets
- 1.5.5.** (1) Hardware Bag
 - 1.5.5.1.** (14) M6x1.0 Button Head Cap Screw (BHCS) x 16mm Long, SS
 - 1.5.5.2.** (20) M6 Fender Washers, SS
 - 1.5.5.3.** (14) M6x1.0 Serrated Flanged Nuts, SS
 - 1.5.5.4.** (8) M6x1.0 BHCS x 45mm Long, SS
 - 1.5.5.5.** (8) M6 5mm Long Nylon Spacer
 - 1.5.5.6.** (8) M6 10mm Long Nylon Spacer
 - 1.5.5.7.** (8) M6 15mm Long Nylon Spacer

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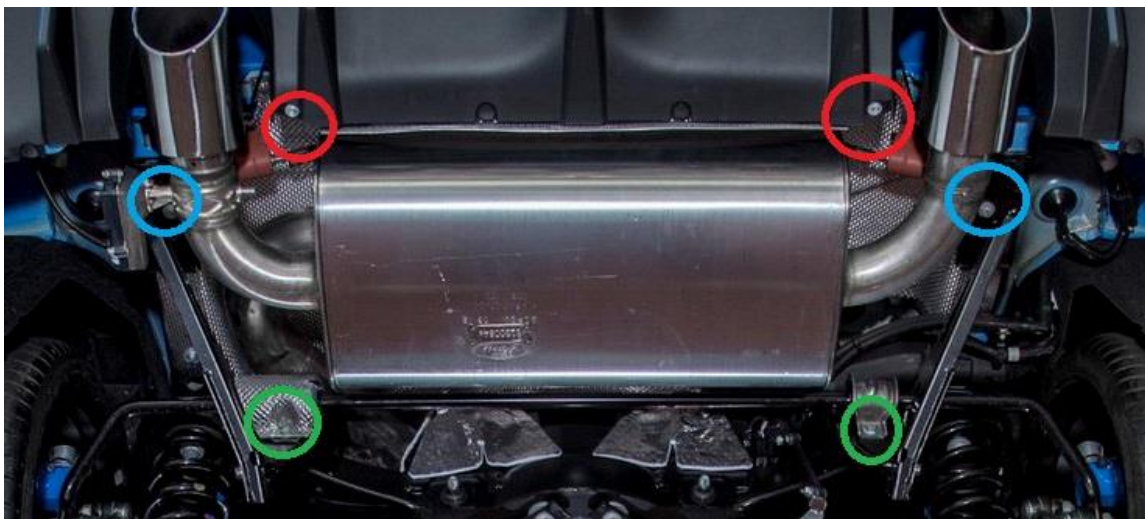


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2. Rear Diffuser Install

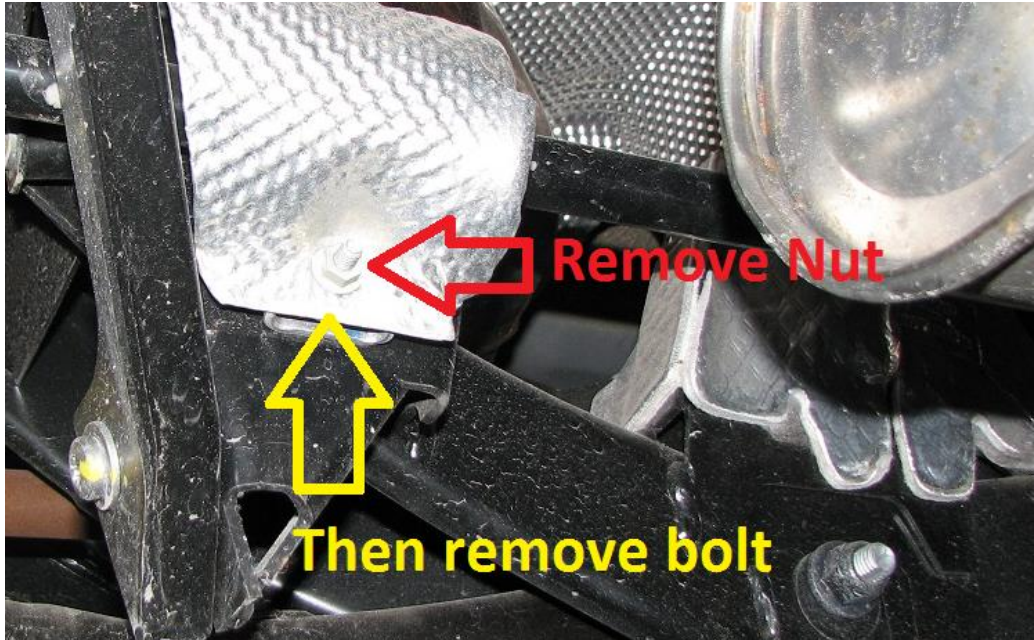
- 2.1.** Velox is not responsible for damage to you or your vehicle by following this manual and/or installing Verus Engineering products on your vehicle.
- 2.2.** We begin by jacking the car up on a level surface. Use of wheel chocks is suggested to keep the front wheels from rolling. Using a lift is also a possibility.
- 2.3.** Secure the car with two jack stands with enough room to access all the area under the rear bumper. The pinch welds are good choices, as are frame rails.
- 2.4.** With the car up in the air, we can have a good look at what we're working with! The front brackets will go where the green circles are located, the mid-brackets will be installed where the blue circles are located, and finally the rear brackets will go where the red circles are located.



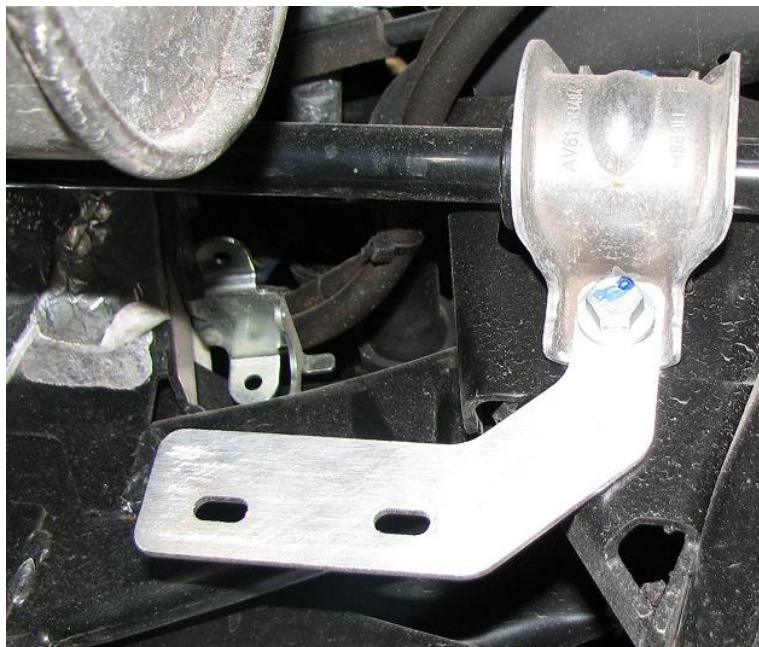
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- 2.5. Starting with the front mounting points, we remove the bolts from the rear sway bar bracket location. We only need to remove the lower bolt. On the driver's side, you must remove first the heat shield nut, then slightly bend the shield up, and remove the bolt.



- 2.6. With the bolts removed, we can install the Verus Engineering front brackets as shown below. This is the passenger side. Torque the bolt to spec (approximately 30 ft-lbs).



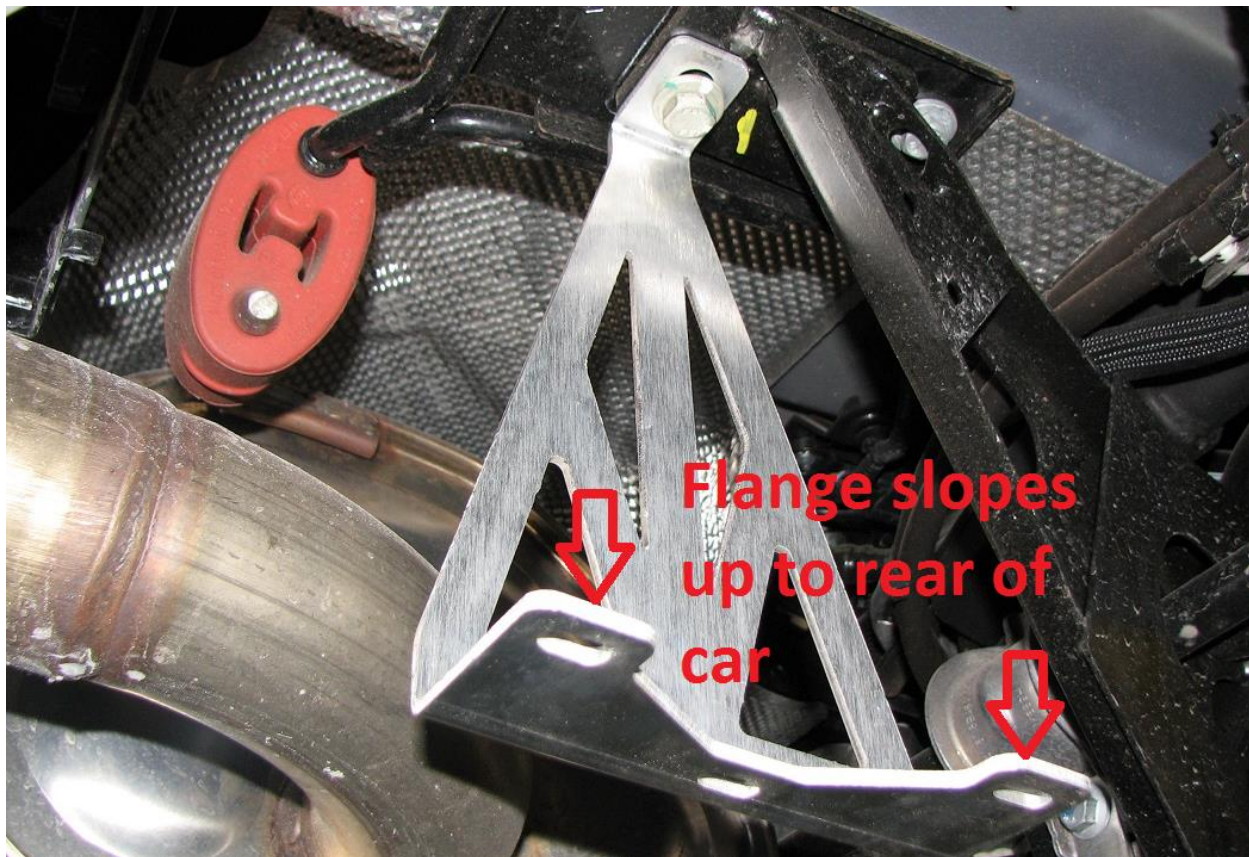
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- 2.7. Moving onto the mid-bracket, remove the 13mm bolt which is removed in the below picture and circled in red. Note, this is the passenger side.



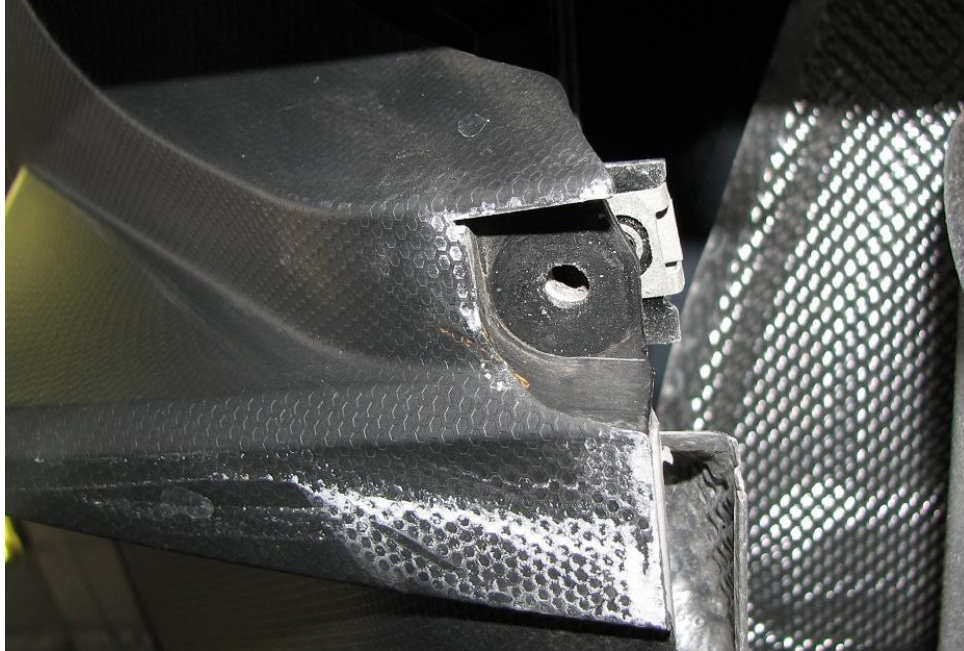
- 2.8. Install the mid-bracket as shown below. Note orientation of the bracket. Below photo is again, of passenger side of car. Use the OEM bolt to secure this bracket but **do not tighten it yet**.



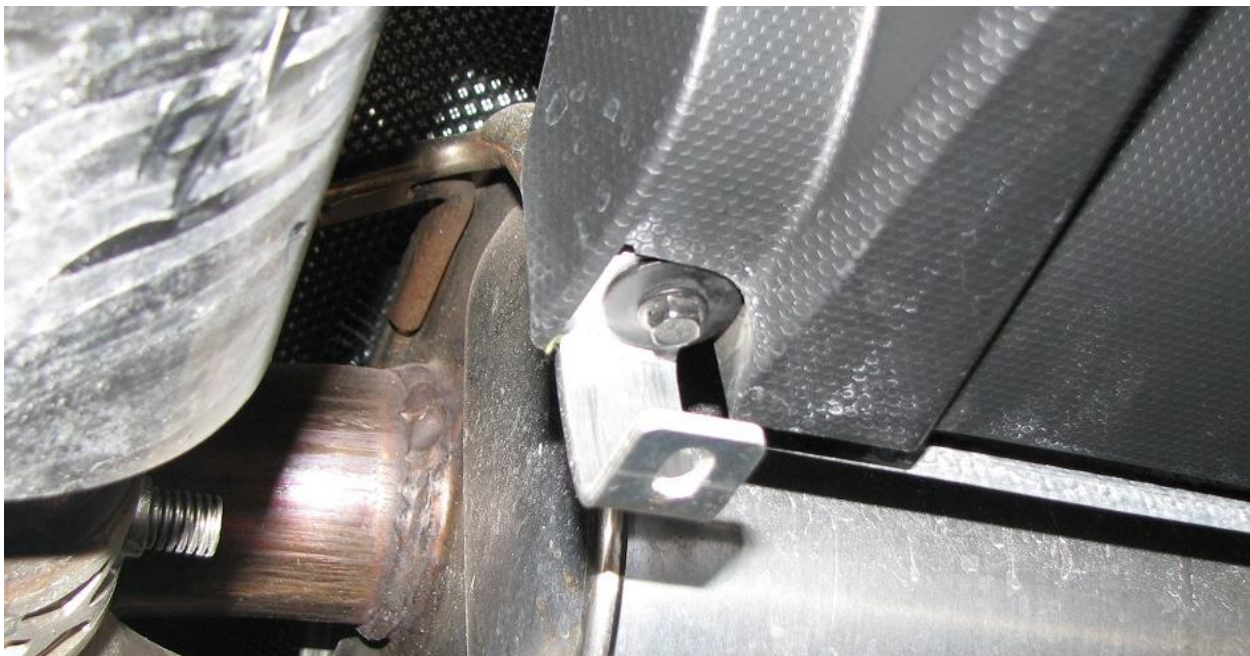
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- 2.9. Finally, we move to the rear brackets. Remove the bolt (missing in the below photo) with an 8mm wrench or socket.



- 2.10. Install the rear brackets as shown below using the OEM bolt. Note orientation and how the angle of the bottom of the bracket slopes upward towards the rear of the car. The vertical section of the bracket should be vertical. The picture below is of the driver's side.



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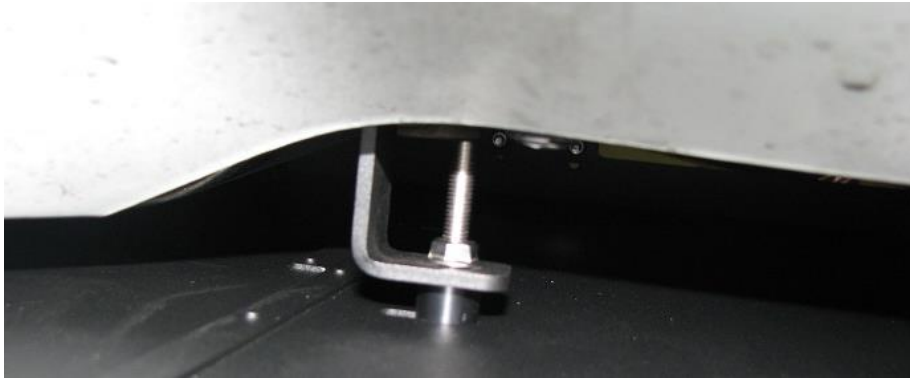
- 2.11. Repeat steps until all four brackets are installed.
- 2.12. The rear diffuser is now ready to install!
- 2.13. Installing the diffuser is aided by a second pair of hands, but it can be done alone.
- 2.14. The front **four** bolts receive a M6 x 1.0 x 16mm bolt and a washer from the front, and get a nut on the rear. The mid and rear brackets receive either the 16mm long bolts, if the diffuser can be installed in the highest position; or, if the diffuser has to be installed lower, the M6 x 1.0 x 45mm long BHCS. Washers go on the bottom side, serrated nuts on the top.
- 2.15. Front bolts installed correctly shown below.



- 2.16. At this point, we need to figure out how far up the diffuser can sit. This is determined by the exhaust used on the car. We recommend installing the diffuser as far upward on the car as possible.

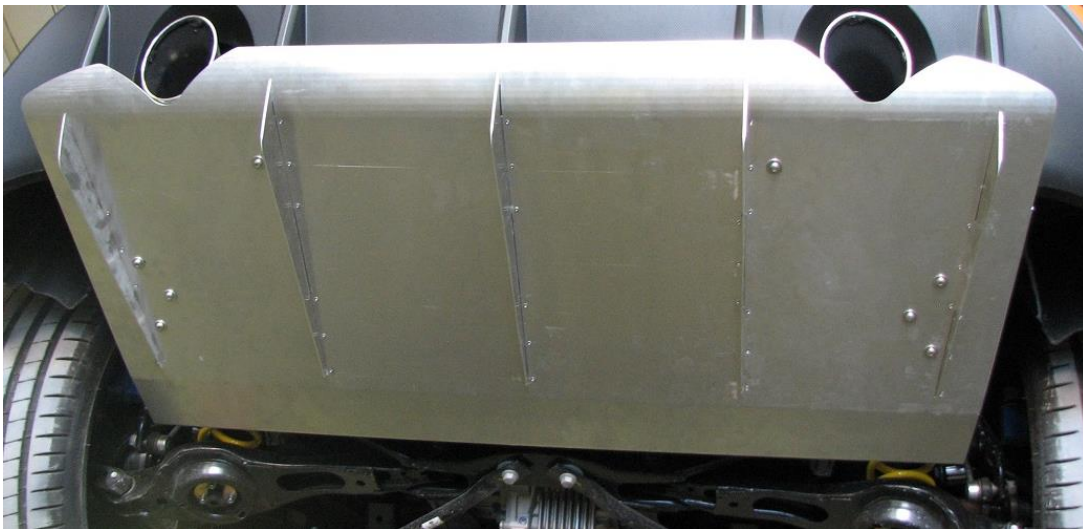
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- 2.17.** When you figure out how high up the diffuser can sit, we can install the mid-bracket bolts. Using washers and/or nylon spacers to achieve the correct height, install these between the rear diffuser and the bracket (as shown below). On our specific install, we used no spacers/washers for the desired diffuser install height.



- 2.18.** Once all the mid-brackets bolts and nuts are installed, we can move to the rear brackets. Install spacers as necessary to achieve correct diffuser height install.

- 2.19.** Once all bolts and nuts are installed, tighten all button head cap screws to approximately 10 ft-lbs. The serrated nuts, when tightened, will resist backing off.

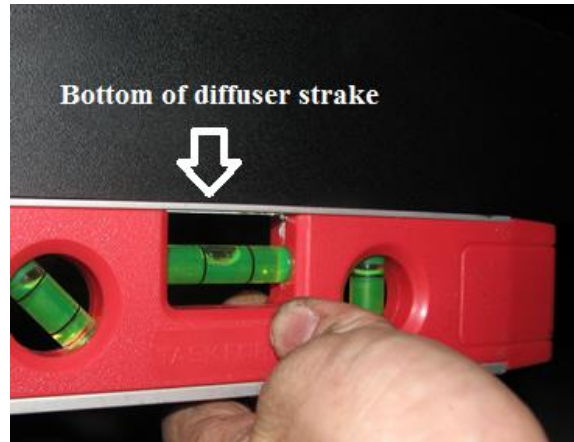


- 2.20.** The only bolts that are still loose should be the bolts that hold the mid-bracket to the car. Tighten these and ensure all other bolts are fully tightened.

- 2.21.** With the car on the ground and no rake, the diffuser strakes should be level. If the car does have some rake, you need to match the underbody's angle with the level of the bottom of the strake. Shown below is a car with no rake.

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- 2.22. You should also ensure that the diffuser is level laterally (left to right) with a level when on a level surface.
- 2.23. Congratulations, you've successfully installed the Verus Engineering Mk3 Focus RS rear diffuser! You can now benefit from an increase in rear end downforce and a reduction in vehicle drag among other benefits.
- 2.24. Please contact Verus with any feedback, concerns, and questions via e-mails, sales@verus-engineering.com.



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