Nissan R35 GT-R Rear Diffuser Strake Kit

Install Manual

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Document Revisions

Rev	Date	Author	Description
01	2017/04/03	E. Hazen	Initial release of install manual
02	2017/08/08	P. Lucas	Company name change from Velox to Verus

CONTENTS

R35 GT-R Rear Diffuser Strake Kit – Install Manual

1. Introduction

1.1. Overview: Detailed instructions on installing the rear diffuser strakes for the R35 GT-R.

1.2. Difficulty: Moderate

1.3. Time Required: 2 hours

1.4. Tools Needed:

1.4.1. Drill
1.4.2. Painter's Tape
1.4.3. 1/8" drill bit
1.4.4. 1/4" drill bit
1.4.5. Electric or pneumatic die grinder
    1.4.5.1. http://www.harborfreight.com/power-tools/grinders-buffers/4-12-in-5-amp-heavy-duty-angle-grinder-60372.html
1.4.6. Cut-off wheel (not harbor freight, they are junk)
1.4.7. Sanding discs
1.4.8.Ratchet
1.4.9.10mm Socket
1.4.10. 12mm Socket
1.4.11. 4mm Allen Wrench/Allen Socket
1.4.12. 5mm Allen Wrench/Allen Socket
1.4.13. Flat head screwdriver
1.4.14. Tape Measure

1.5. Rear Diffuser Strake Components

- **1.5.1.** Left-Hand Outside Strake
- **1.5.2.** Left-Hand Inside Strake
- **1.5.3.** Right-Hand Inside Strake
- **1.5.4.** Right-Hand Outside Strake
- **1.5.5.** Cutting Template
- **1.5.6.** Hardware Bag
  - **1.5.6.1.** (3) M8 x 1.25 Stainless BHCS (Button Head Cap Screw) x 20mm Long
  - **1.5.6.2.** (3) M8 Large Stainless Washer
  - **1.5.6.3.** (11) M6 x 1.0 Stainless BHCS x 16mm Long
  - **1.5.6.4.** (11) M6 x 1.0 Stainless Serrated Nut
  - **1.5.6.5.** (20) M6 Large Stainless Washer
  - **1.5.6.6.** (9) M6 x 1.0 Stainless BHCS x 25mm Long

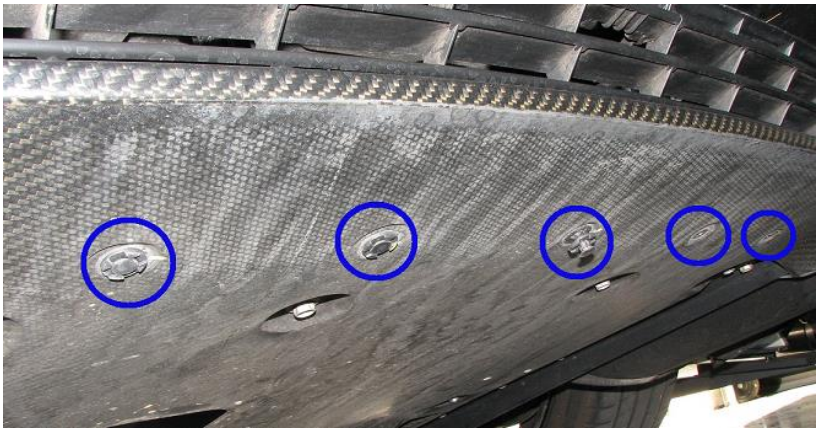
2. Rear Diffuser Install

2.1. Velox is not responsible for damage to you or your vehicle by following this manual and/or installing Verus Engineering products.

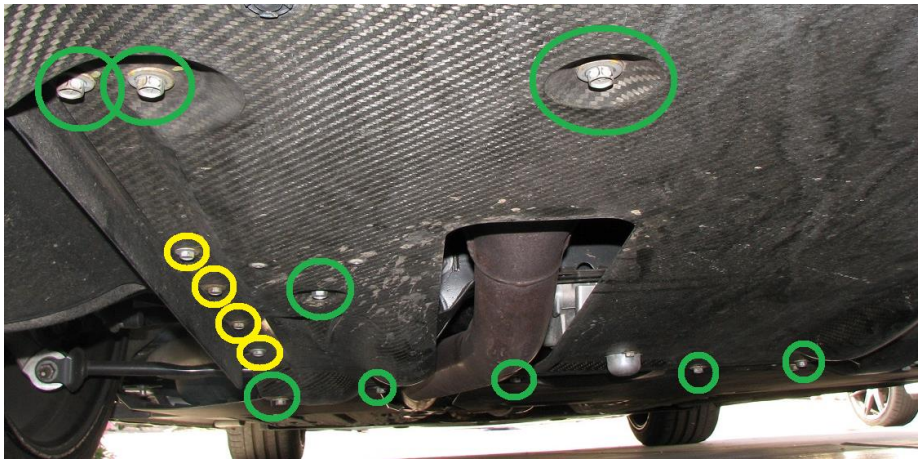
2.2. We begin by jacking up the rear of the car or lifting the car on a lift. We need to remove the rear diffuser and the locations behind the rear wheels for this install.

2.3. To jack the car up, you can either use the location on the rear diffuser, or use the pinch welds on the side of the car. Use whatever system you're comfortable with and place the car on jack stands.

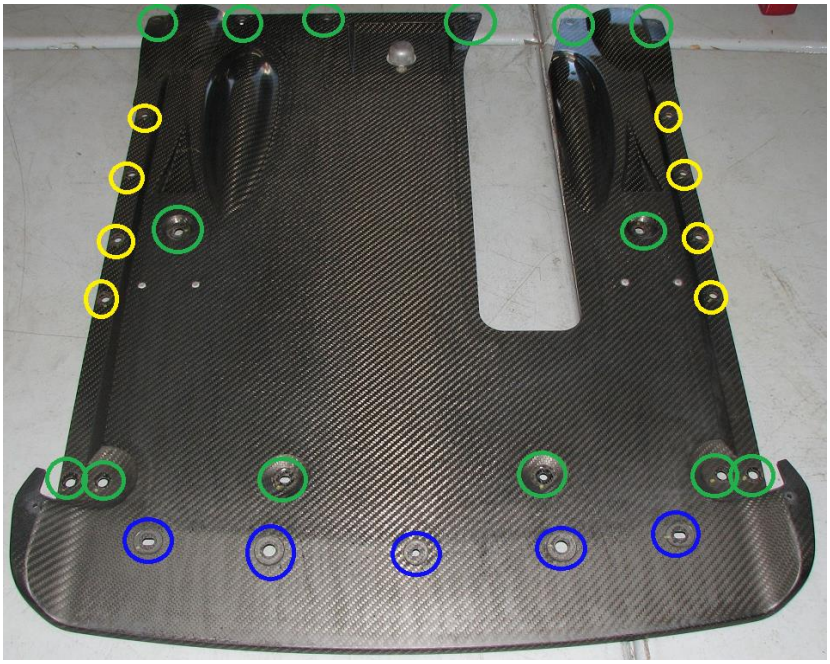
2.4. With the car slightly lifted, we can get access to the rear diffuser. Starting with the rear diffuser, we remove all the plastic clips on the trailing edge circled in blue.



2.5. Using the ratchet, 10mm, and 12mm socket, we can remove the diffuser. The 12mm bolts are circled in green below, and the 10mm bolts are circled in yellow. Note, the picture only shows the driver's side of the rear diffuser.



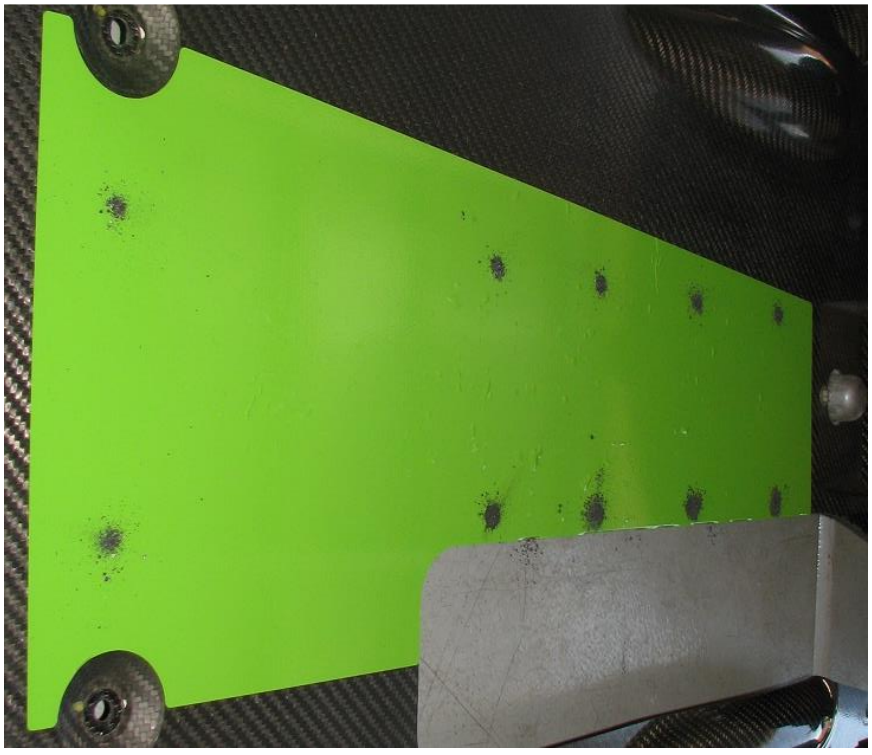
2.6. With the diffuser off the car, we have the below picture. Again, blue are plastic clips, green are 12mm bolts, and yellow 10mm bolts. The diffuser is fairly light and can be removed by yourself easily.



2.7. Next, we install the cut template. It will be installed as shown below, match up the exhaust cutout and the two rear holes as closely as possible.

2.8. With the template installed, we can find the (10) total crosshatch marks on the template. These are difficult to see but ensure accuracy for drilling. One of these crosshatch marks is shown below.

2.9. Using a small starter sized drill bit (1/8" will work well), drill through the carbon as straight as possible while staying on the crosshatch. We found high speed and light pressure worked well; let the drill bit cool slightly between drilling.

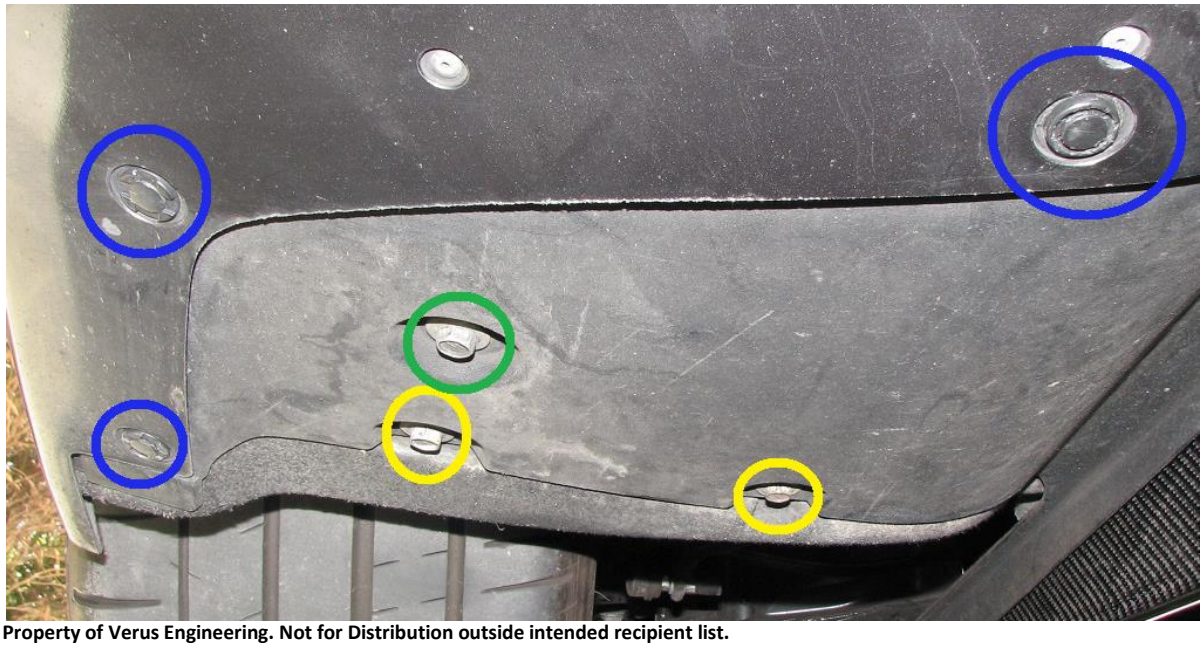


2.10. With the holes started, we can open it up to the final size, 1/4". Using a similar style as the starter holes, drill these holes larger.

2.11. With the holes at their final size, we can use a shop-vac to clean up most of the carbon.

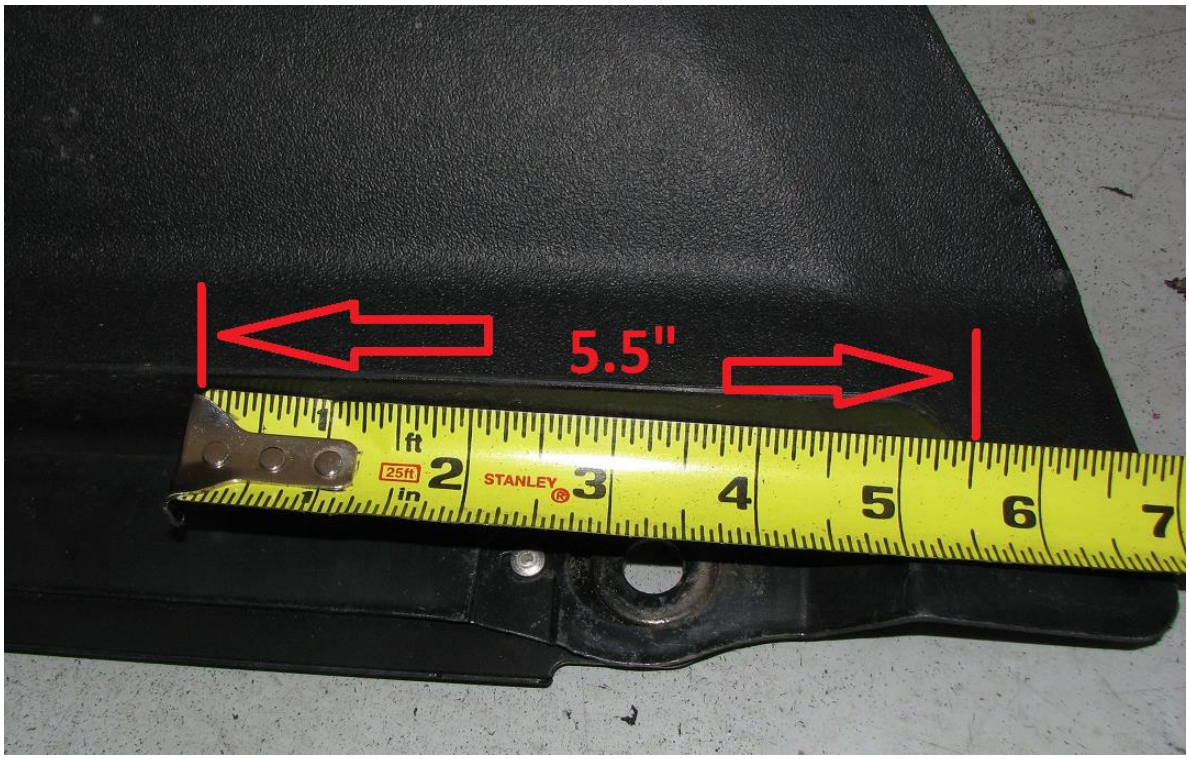
2.12. Remove the vinyl template.

2.13. Moving to the side pieces on each side of the diffuser, which is behind the rear wheels, we need to remove this plastic piece. A few plastic clips, circled in blue, 10mm bolts, circled in yellow, and a 12mm bolt, circled in green.



2.14. Remove the other side as well.

2.15. We need to remove a part of the vertical piece on each of these. Roughly 5.5” needs cut off, as shown below.



2.16. Using the die grinder or a dremel, remove this section and then sand it smooth.

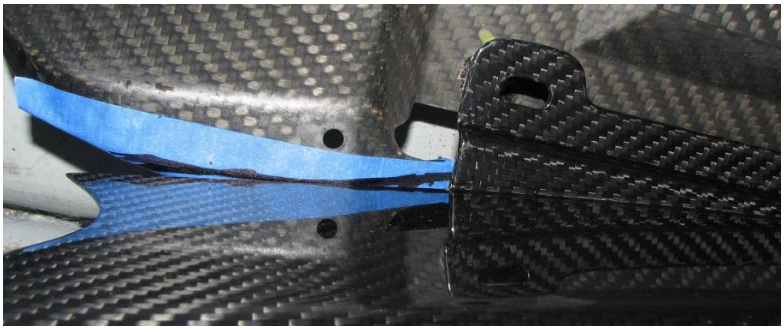
2.17. Reinstall the plastic, pieces in their appropriate locations with factory hardware.

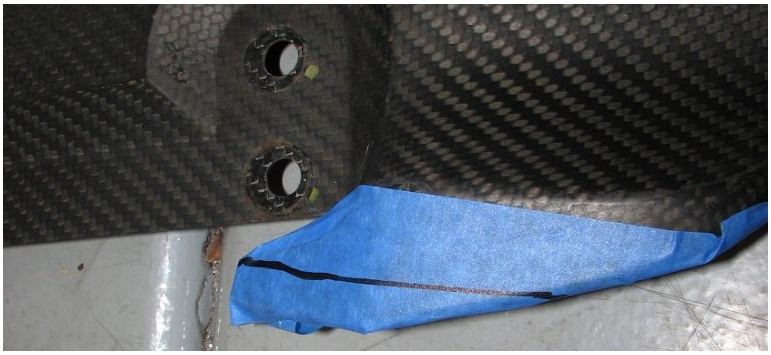
2.18. Moving back to the rear diffuser; the rear diffusers are slightly different between pre-2012 and 2012 and older. The outer strakes should be able to be installed without any further modification if you have a pre-2012 rear diffuser. **Skip to step 2.24 if this appears to be your case. Follow below for 2012+ model years.**

2.19. Nissan changed the design slightly on the sides for post 2012. Placing the outer strake on the rear diffuser confirms this issue. We can remedy it quickly with a die grinder and cut-off wheel.

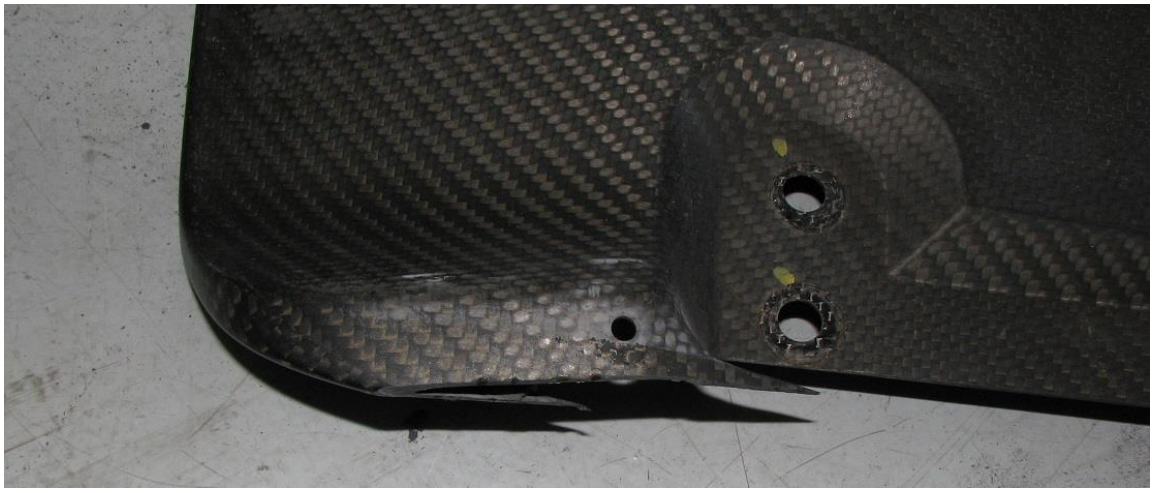
2.20. Apply blue painters tape to the outer edges of the rear diffuser on the areas circled in red.

2.21. Using the outer strake as a guideline, mark the location that needs slight trimming. This is shown below.





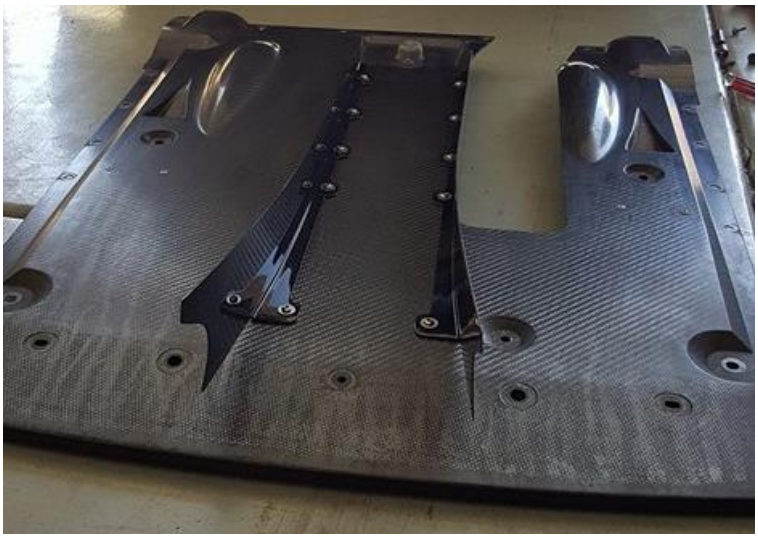
2.22. If you have a mask to use for cutting, it would be recommended to use that now. You will also want to do your best to suck up any dust while using the cut off wheel, a friend could be of some help now.



2.23. Once you ensure proper fitment of the strake, use some sanding discs to clean up the edges. The rear diffuser will look like below.

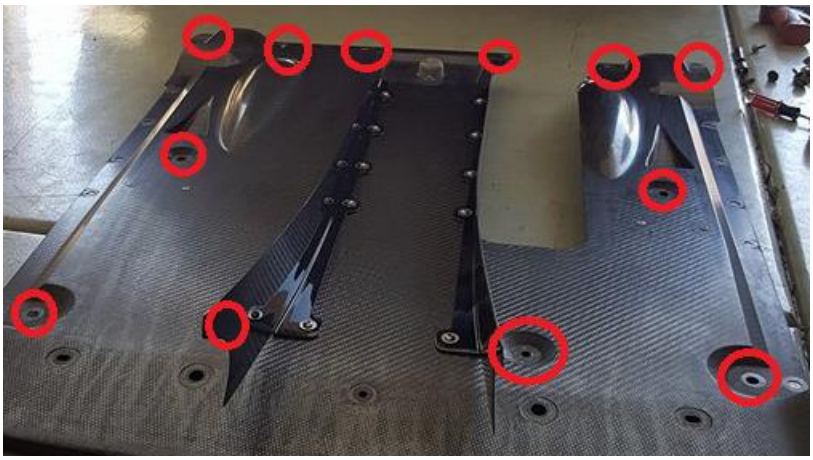
2.24. We can now install the center two strakes with the supplied hardware. We'll be using (10) M6 x 1.0 BHCS in 16mm length, (10) M6 Large washers, and (10) M6 serrated nuts.

2.25. Using the BHCS and washer on the strake, and the nut on the top side of the OEM diffuser, install the two center strakes as shown below.



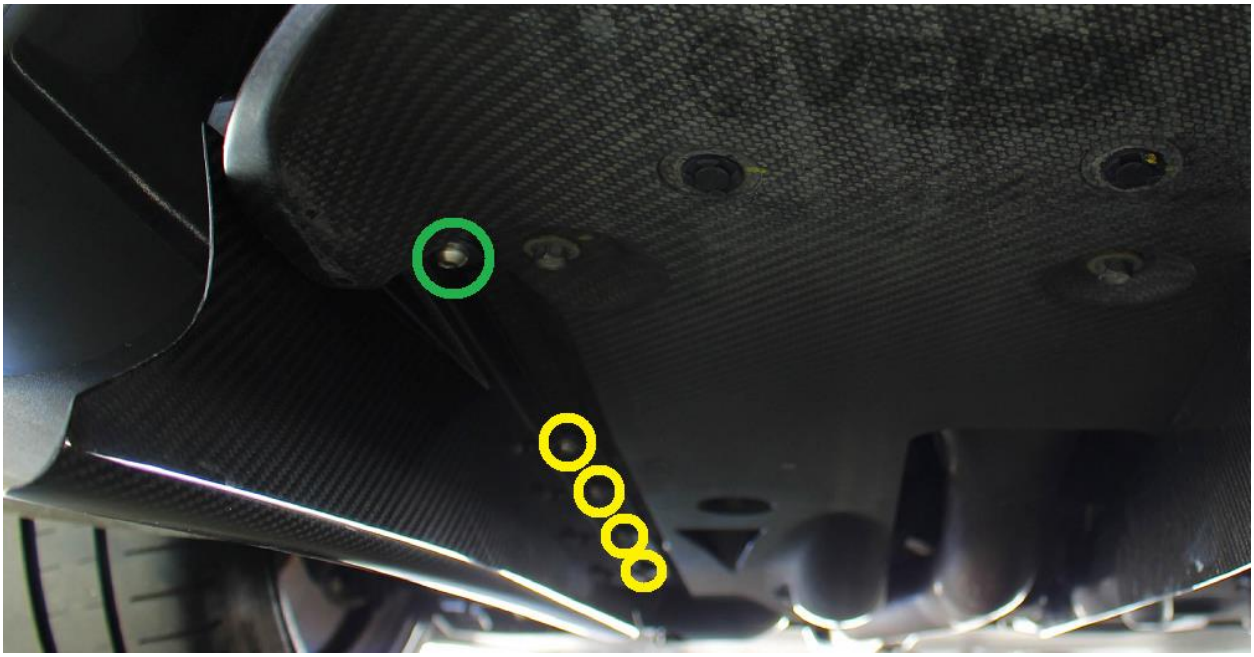
2.26. Tighten these bolts to approximately 8 ft-lbs, just past snug so that the nut doesn't vibrate loose.

2.27. The rear diffuser can now be installed on car again using the factory supplied 12mm bolts circled below in red. Do not install the outer most bolts yet.



2.28. With the diffuser installed on car, we can install the outer strakes with the supplied hardware. On each strake the front (4) bolt holes use the M6 x 1.0 BHCS x 25mm length, M6

large stainless washers, **circled in yellow**, while the rear bolt uses the M8 x 1.25 BHCS x 20mm in length and M8 large washer, **circled in green.**



2.29. Once all bolts are tightened, you can lower the car back down on the ground.

2.30. Congratulations, you have successfully installed the Verus Engineering GT-R rear strakes. The car now benefits from an increase in rear end downforce. Please contact Verus Engineering with any questions, comments, concerns, and feedback via sales@verus-engineering.com.

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