

# Z34 370Z Rear Diffuser

Install Manual



Author: Eric Hazen Release Date: 2017/01/15 Approvals: E. Hazen, P. Lucas

# **Document Revisions**

Rev	Date	Author	Description	
01	2017/01/15	E. Hazen	Initial release of install manual.	
02	2017/08/08	P. Lucas	Company name change from Velox to Verus	



# CONTENTS

1.	Introduction	<<3>
	1.1. Overview	<3>
	1.2. Difficulty	
	1.3. Time Required	<3>
	1.4. Tools Needed	<3>
	1.5. Rear Diffuser Components	<3-4>
2.	Rear Diffuser Install	<4-11>



- 1. Introduction
  - **1.1. Overview:** Detailed instructions on installing the Verus Engineering functional rear diffuser on the Z34 370Z.
  - **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)
  - 1.4.2.14mm Socket
  - 1.4.3.12mm Socket
  - 1.4.4.Ratchet
  - 1.4.5.Extension(s)
  - 1.4.6.4mm Allen wrench or socket
  - 1.4.7.Phillips screwdriver
  - 1.4.8.Flat head screwdriver
  - 1.4.9.10mm wrench
  - 1.4.10. Level
  - 1.4.11. Drill
  - 1.4.12. Hammer
  - 1.4.13. Center punch
  - 1.4.14. 1/8" drill
  - 1.4.15. 1/4" drill

#### **1.5.** Rear Diffuser Components:

- 1.5.1. Rear Diffuser
- 1.5.2. (1) Front Bracket
- 1.5.3. (2) Mid-Brackets
- **1.5.4.** (2) Outside Brackets
- 1.5.5. (1) Rear Bracket
- **1.5.6.** (1) Hardware Bag
  - **1.5.6.1.** (16) M6x1.0 Button Head Cap Screw (BHCS) x 16mm Long, SS
  - **1.5.6.2.** (20) M6 Fender Washers, SS
  - **1.5.6.3.** (16) M6x1.0 Serrated Flanged Nuts, SS
  - **1.5.6.4.** (4) M6x1.0 BHCS x 45mm Long, SS
  - 1.5.6.5. (4) M6 5mm Long Nylon Spacer
  - 1.5.6.6. (4) M6 10mm Long Nylon Spacer
  - **1.5.6.7.** (4) M6 15mm Long Nylon Spacer





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!





**2.5.** Below is a close picture of where the front mounting bracket will go. The bolts circled in red will need removed. Remove these three bolts with a ratchet and socket.

**2.6.** Install the front bracket for the diffuser as shown below and re-install the bolts, leaving it loose to float as necessary during install.





**2.7.** Below is a picture of the passenger side exhaust hanger bracket. Remove the bolt circled in green on both sides of the car. We will install the mid-brackets here.



**2.8.** Install the correct side mid-bracket (there is a right and a left side, they are not identical) using the OEM hardware on these locations. Below is a photo of the driver's side mid-bracket installed correctly.





**2.9.** Next up is the outside brackets. To install these, remove the Philips screw and 10mm bolt from behind the rear wheel, circled in blue below.



**2.10.** Using the OEM hardware, install the brackets loosely as shown below. The bracket must go above the mud flap behind the rear wheel. Bolts do not need to be tightened currently, the bracket needs to float for install.





Author: Eric Hazen Date: 2017/01/15 Recipients: Public

Z34 Nissan 370Z Rear Diffuser

**2.11.** The final bracket to be installed will be the rear bracket. This bracket requires slight drilling but it isn't too bad. Below is a photo of how the bracket will be installed.



**2.12.** Remove the bracket circle in yellow from the car.



**2.13.** With the bracket off, center punch the two holes necessary to install the bracket.



- **2.14.** Use a small drill bit at first, then step up to a 1/4" drill bit.
- 2.15. Using the supplied M6 x 1.0 x 16mm long BHCS, washers, and serrated nuts, install the supplied rear bracket.
- **2.16.** Finally, install this newly modified bracket with the Velox rear bracket back onto the car with all the OEM hardware.



- 2.17. It is finally time to install the rear diffuser!
- **2.18.** Installing the rear diffuser is considerably easier with two people but possible to do with one. We recommend installing the diffuser as high as possible on the chassis without hitting the exhaust.
- **2.19.** Use the shorter M6 x 1.0 x 16mm Long BHCS on the front (3) locations, and the outside brackets (4 locations). Depending on how low the diffuser is installed, you may be able to use the short bolts on the mid and rear bracket locations.
- **2.20.** While installing the mid and rear bracket bolts, you may need to install spacers between the brackets and the rear diffuser as shown below. Remember to try and install the diffuser as high as possible on the chassis.





**2.21.** All the bolts should be installed at this point, but loose. It's now time to tighten all the loose bolts up.



Confidential: Property of Verus Engineering. Not for Distribution outside intended recipient list.



**2.22.** 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.



- **2.23.** You should also ensure that the diffuser is level laterally (left to right) with a level and while tightening the bolts.
- **2.24.** After ensuring that all bolts are tightened, you're finished!
- **2.25.** Congratulations, you've successfully installed the Verus Engineering 370Z rear diffuser! You can now benefit from an increase in rear end downforce and a reduction in vehicle drag among other benefits.
- **2.26.** Please contact Velox with any feedback, concerns, and questions via e-mails, <u>sales@verus-engineering.com</u>.

