

# Mk3 Ford Focus RS Dive Plane Kit

Install Manual



Author: Eric Hazen Release Date: 2018/02/20 Approvals: E. Hazen, P. Lucas

**Document Revisions** 

Rev	Date	Author	Description
01	2018/02/20	E. Hazen	Initial release of install manual



# CONTENTS

1.	Introduction	_
	1.1. Overview	<<3>
	1.2. Difficult	<<3>
	1.3. Time Required	<<3>
	1.4. Tools Needed	<<3>
	1.5. Dive Plane Components	
2.	Dive Plane Install	<4-8>



- 1. Introduction
  - **1.1. Overview:** Detailed instructions on installing the dive planes on the ND Miata.
  - 1.2. Difficulty: Easy
  - 1.3. Time Required: 1 hour

#### 1.4. Tools Needed:

- 1.4.1. Tape
- 1.4.2. Drill
- **1.4.3.** 1/8" Drill Bit
- **1.4.4.** 11/64" Drill Bit
- **1.4.5.** Center Punch or Sharp Tap
- 1.4.6. Counter Sink
- **1.4.7.** 7mm Wrench
- **1.4.8.** 7mm Socket and Ratchet
- **1.4.9.** Flat Head Screwdriver
- 1.4.10. 2.5mm Allen Wrench



#### **1.5. Dive Plane Components**

- 1.5.1. Left-hand Dive Plane
- **1.5.2.** Right-hand Dive Plane
- **1.5.3.** Hardware Bag
  - **1.5.3.1.** (9) M4 x 0.7 Stainless Button Head Cap Screw (BHCS), 12mm Long
  - **1.5.3.2.** (9) M4 x 0.7 Nyloc Nut, Stainless
  - 1.5.3.3. (19) M4 Large Diameter Washers, Stainless
  - **1.5.3.4.** (2) Paper Install Templates



# 2. Focus RS Dive Plane Install

- **2.1.** Verus Engineering 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 gaining access to rear of the front bumper so that we can place the nuts on the back side of the bumper.
- **2.3.** In the fender, we have to remove (2) plastic rivets. These are circled below in red.

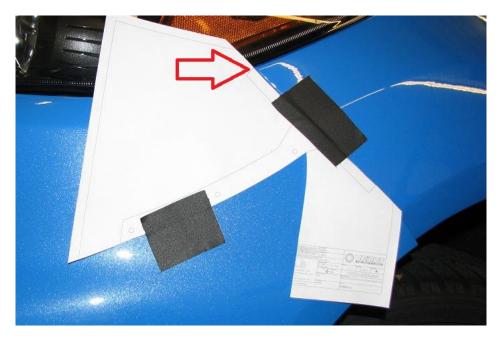


- **2.4.** The bumper can be pulled away from the fender plastic at this point which will allow us to place the nuts on the rear of the dive plane during install.
- **2.5.** Utilizing scissors, cut the templates as shown below for easier install.

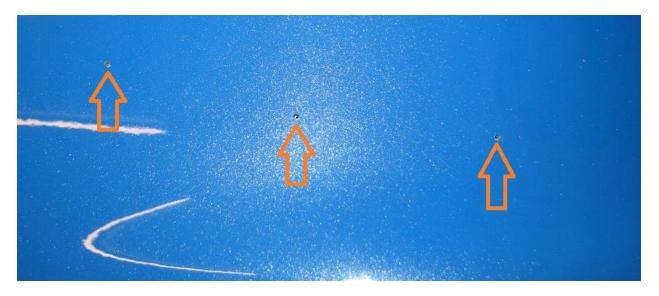




**2.6.** We now install the templates on the front bumper as shown below. Note that the corner of the template, lines up with the headlight location, as pointed out with a red arrow.



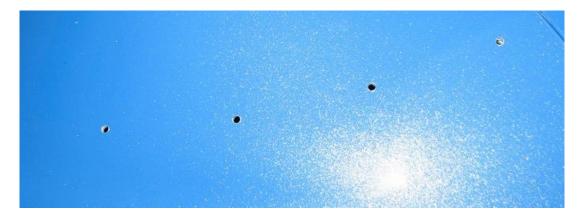
**2.7.** Using a few pieces of tape or another pair of hands while holding the dive planes in place, we will mark the (4) holes of the dive plane for drilling. Use a center punch or a sharp tap on these locations.



**2.8.** With a drill and 1/8" drill bit initially, very carefully drill the holes in the bumper. Try not to go through anything behind the bumper.



**2.9.** Increasing the drill size to 11/64" and open the holes to 11/64".



- **2.10.** Using the countersink, clean the holes from any burrs from drilling.
- 2.11. Using the M4 bolts, and a washer on the outside if you chose, begin installing the dive planes. We chose not to use a washer on the outside but there is enough supplied in the kit to do a washer on both sides.
- **2.12.** Reaching your hand behind the front bumper through the fender liner, you can start threading on the washer and then the nyloc nut. You can pull the bumper out from the car quite a bit, as shown below, to gain access.



**2.13.** With the nuts and washers on the rear side of the bumper, you can tighten the bolts on the dive planes. We found tightening the nuts from the back side with a ratchet and socket to be easiest.





- **2.14.** Tighten torque should be no more than 40-60 in-lbs. The nyloc will resist backing off, so the fasteners only need to be snug to the bumper.
- **2.15.** Repeat the steps on the other side of the car.
- **2.16.** Reinstall everything in reverse order.
- **2.17.** Congratulations on installing the Verus Engineering dive planes for the ND Miata. Enjoy the benefits the dive planes have on front end downforce.
- **2.18.** Please send any questions, comments, concerns, or photos to Verus Engineering via e-mail; sales@verus-engineering.com.





