



VERUS ENGINEERING

Dive Plane Kit for the ND Miata Install Manual



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Dive Plane for ND Miata – Install Manual

CONTENTS

1. Introduction	<3>
1.1. Overview	<3>
1.2. Difficult	<3>
1.3. Time Required	<3>
1.4. Tools Needed	<3>
1.5. Dive Plane Components.....	<3-4>
2. Dive Plane Install	<4-7>

Dive Plane for ND Miata – Install Manual

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

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Dive Plane for ND Miata – Install Manual

**2. ND Miata 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.** Remove the three plastic rivets on the front of the wheel well with the flat head screw driver. See below for the (3) units circled in yellow. This will allow us to gain enough access to the rear of the front bumper to fasten a nut on the bolts.



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Dive Plane for ND Miata – Install Manual

- 2.4. View the below image to understand where we recommend installing the dive planes. **Ultimately, the end location is up to you as the installer, but this is where we found the most benefit on the ND from CFD analysis.**



- 2.5. Using a few pieces of tape (as shown above) or another pair of hands, we will mark the (4) holes of the dive plane for drilling. Use a center punch or a sharp tap.
- 2.6. 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.
- 2.7. Increasing the drill size to 11/64" and open the holes to 11/64".



- 2.8. Using the countersink, clean the holes from any burrs from drilling.
- 2.9. 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.**

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Dive Plane for ND Miata – Install Manual

- 2.10. Reaching your hand behind the front bumper through the fender liner, you can start threading on the washer and then the nyloc nut.
- 2.11. 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.



- 2.12. 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.
- 2.13. Repeat the steps on the other side of the car.
- 2.14. Reinstall everything in reverse order.
- 2.15. Congratulations on installing the Verus Engineering dive planes for the ND Miata. Enjoy the benefits the dive planes have on front end downforce.
- 2.16. Please send any questions, comments, concerns, or photos to Verus Engineering via e-mail; sales@verus-engineering.com.

Dive Plane for ND Miata – Install Manual



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