

VERUS

ENGINEERING

Tomei Type 80

Installation Manual



Author: E. Hazen

Release Date: 01/22/2016

Approvals: P. Lucas

Document Revisions

Rev	Date	Author	Description
01	01/22/2016	E. Hazen	Issued for Release
02	08/08/2017	P. Lucas	New template, Company name change from Velox to Verus

CONTENTS

1. <u>Overview:</u>	<3>
2. <u>Difficulty:</u>	<3>
3. <u>Time Required:</u>	<3>
4. <u>Tools Needed:</u>	<3>
5. <u>Assembly Parts:</u>	<3>
6. <u>Installation:</u>	<4-9>

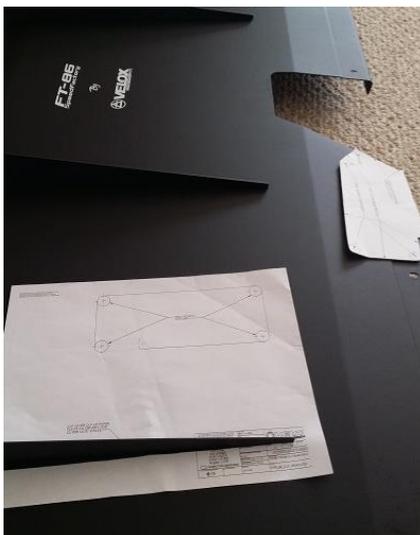
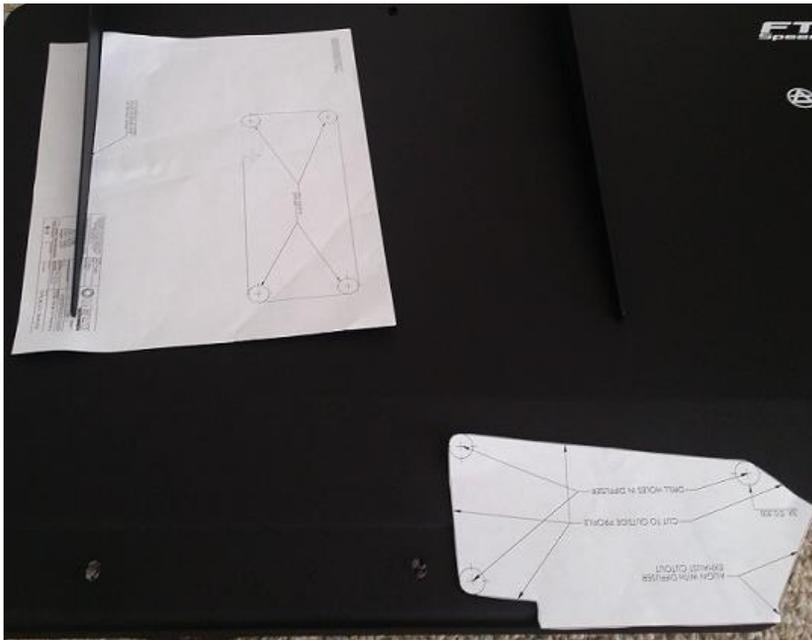
1. Overview:
Detailed instructions on installing the type 80 kit for the FR-S/BRZ/GT86 rear diffuser
2. Difficulty:
Novice-Advanced
3. Time Required:
60-120 minutes
4. Tools Needed:
 - Hammer
 - Scissors
 - Center punch (or sharp tap)
 - Start drill bit
 - Step Drill Bit
 - Straight and 90 Deg grinder
 - Drill
 - Countersink
 - Cut-off wheel
 - Finishing disk for deburring
 - Sheet metal shears (optional)



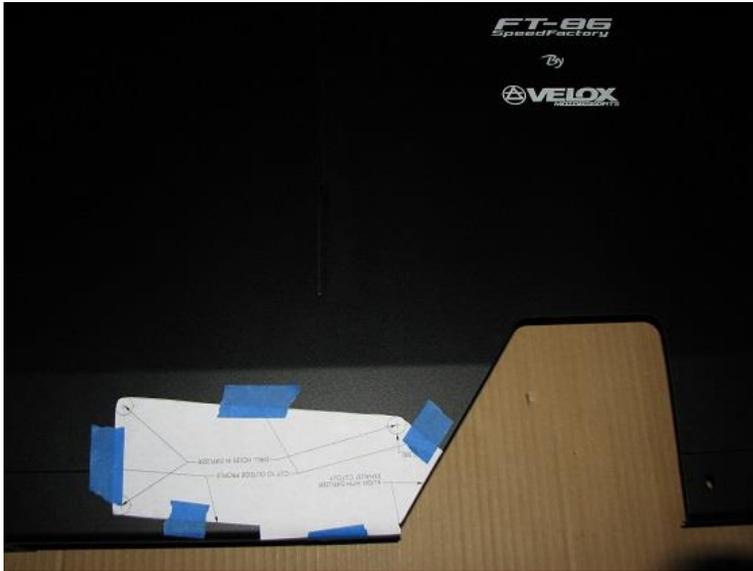
5. Assembly Parts:
 - (2) Templates
 - (4) 5mm Nylon Spacers

6. Installation:

- 6.1. We are not responsible for damage to your vehicle by following this manual.
- 6.2. We are assuming that the diffuser is off the vehicle for this install. If it is installed, remove the diffuser and place it on a box. **It is important to remember that the templates are a good start point. The Tomei Type 80 has an infinite amount of ways to be installed due to the mounting and flange type. Every install will be a bit different! It is wise to take your time and test fit multiple times before making holes and cutting. Remember to try different exhaust fitments/clocking as well to keep the Tomei up and away from the diffuser.**
- 6.3. Using scissors, cut out the two templates. They should fit on the diffuser as shown below.



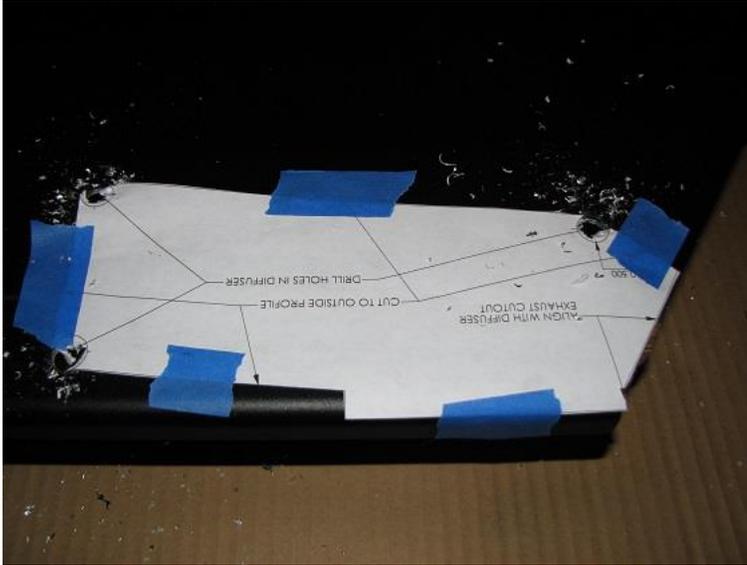
6.4. Using blue tape, tape the below template onto the bottom side of the diffuser as shown below.



6.5. Using the hammer, a center punch, and something beneath the diffuser for support (2x4s work well), center punch the (3) holes marked on the template.



6.6. With these holes center punched, use the pilot drill bit to get the holes started.



- 6.7.** Using the stepped drill bit, drill through the diffuser completely and pull off the template. Countersink the holes. Using the template and blue tape, map out how you will cut the diffuser.



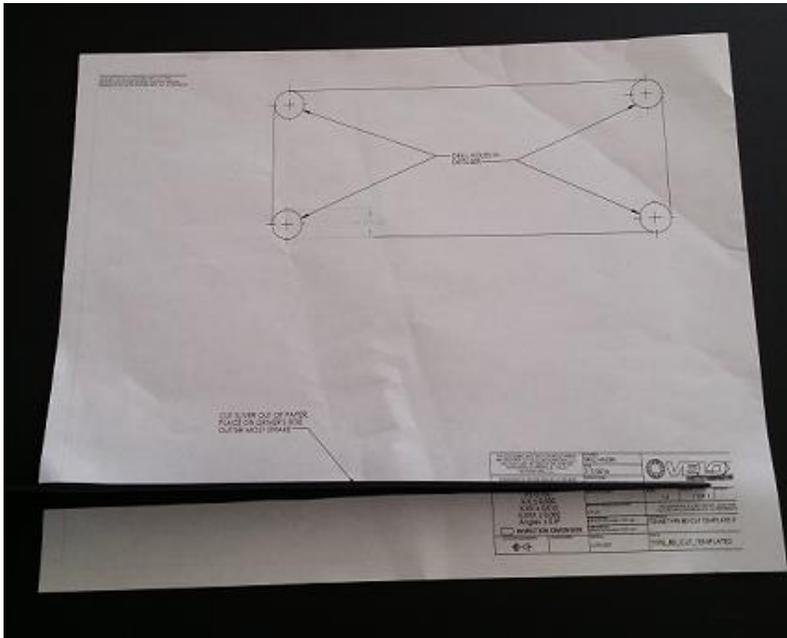
- 6.8.** Using either the cut off wheel or the sheet metal shears, follow the lines created by the blue tape. If this is your first time doing something of this sort, use the material you will cut out to test and ensure everything will go well.
- 6.9.** Hint: Sheet metal sheers will curl one side of the material, cut the piece out so that the curled part is the piece that will be removed. See below for clarification.



- 6.10.** Using the 90 degree angle grinder and sheet metal finisher, clean up the cuts so that the edges are nicely finished.



- 6.11.** Using a can of spray paint, you can finish the edges to make them black or leave them as cut if the color does not bother you.
- 6.12.** Moving to the muffler cutout, perform the same operations as before using the other template (shown below). Center punch, start drill bit, step drill bit, fully cut out, and finish the edges.



- 6.13.** To finalize install, follow the remainder of the diffuser install guide. You will likely need to use the additional 5mm spacers on the rear mounting points.



- 6.14.** If all goes well, the install should look similar to the photo below.



6.15. Enjoy the increase in downforce and reduced drag of the newly installed diffuser.