

## Miata Radical Air Splitter/Protector

Year: 1990-1997 with Factory R-Package Lip Item: TDR-90M125



Thank you for purchasing the Track Dog Racing Radical Air Splitter. The Air Splitter is designed to help protect the factory R-Package lip by allowing the Air Splitter to slide over obstacles, such as steep driveways. The TDR Radical Air Splitter is made from 3/16" thick, high-impact ABS plastic and will surprisingly take a lot of abuse. The textured top finish blends in well with any color however; you might consider painting the R Spoiler for a nicer appearance such as the picture above.

The TDR Air Splitters are supplied with corrosion resistant metal hardware that will hold up to daily use. We specified the metal bolts for durability and strength. Also included are adjustable length aluminum struts for a rigid mounting. Please read the instructions completely before starting. The following tools are recommended for installation.

#### **Tools Needed**

Power drill 1/4" drill bit 10mm combination wrench 7/16" combination wrench Blue medium strength threadlocker Short Phillips screw driver Socket wrench 10mm socket 4mm allen wrench Paint marker (bright color)



**Bubble Level (Optional)** 

#### Instructions

Before installing your Radical Splitter, you <u>will</u> need to reinforce the R-Package lip.

#### Please perform these steps prior to installing TDR Air Splitter.

1. Jack the car up on both sides high enough to be able to get a drill under the car (be sure to use jack-stands for protection).

**NOTE:** Reinforcing the R-Package lip requires drilling four additional holes and fastening with the included hardware. You will drill a hole on either side of the air duct to strengthen this area. It is a weak point and will pull away if this step is not done. **(IMAGE A)** 



- The outer side of the air duct has a hole already. (IMAGE B) Just drill through the bumper. (IMAGE C)
- When drilling, pinch the lip to the bumper and make sure it is straight and lined up before drilling.

**NOTE:** An extra set of hands is helpful to pull the lip away so you can drill as straight a hole as possible. **(IMAGE D)** It's a tight fit but be patient and drill once.













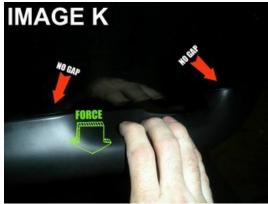
4. Install one of the supplied bolts and nuts. (IMAGE E) Tighten it down but not so much that you distort the look of the bumper or spoiler. (IMAGE F)





5. Now secure the inner portion of the air duct. There are no pre-existing holes so just eye ball it. (IMAGE G) Again, drill once, hold the two pieces together and make sure it looks good. Have your spare set of hands pull the lip back and drill as straight as possible. (IMAGE H)





6. Here is one side with the new bolts in place. (IMAGE J) You should notice the lip is now more secure and actually lines up better with no gap even when applying downward force. (IMAGE K) Repeat steps 2-5 for the other side.



7. Align the inside edge of the Air Splitter with the inside lower section of the air dam. Use the supplied clips in the middle and on both ends to temporarily hold the Air Splitter on to the bottom of the factory air dam. (IMAGE L) Remember, the textured side faces up. Make sure both ends are properly aligned and the Air Splitter is flush to the lower section of the air dam all the way around. This will give you the proper placement of the Air Splitter when attached to your car and viewed from the front.





8. The factory plastic air dam is flexible and will match up to the predrilled holes of the Air Splitter. Use a 1/4" drill bit to drill into the air dam. To simplify the installation, drill the second to the end hole first (IMAGE M) and mount the Air Splitter using the supplied metal hardware (hand tighten until all hardware is installed). After drilling each hole, remove any plastic shavings that might be between the Air Splitter and the air dam to ensure a clean fit. Drill each hole and attach the hardware as you go.

**NOTE:** The temporary clips are guides only. As you drill the actual holes, you may have to adjust the Air Splitter with the air dam for proper alignment.

9. After all the holes are drilled and all the hardware is mounted tighten the metal bolts using a 10mm socket and wrench.

Once the splitter is installed you will need to install the braces.

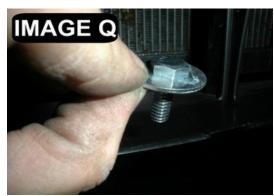






10. Locate the plastic screws in the upper section of your grill opening. (IMAGE N) There are three of them. You will remove the two outer ones and leave the center one. Take a short screw driver to remove the center screw. (IMAGE O)





11. With the screw out, you can remove the plastic plug to expose the hole. (**IMAGE P**) Take one of the SAE threaded bolts supplied in the kit and one of the large washers. (**IMAGE Q**)





12. If you bend the plastic bumper cover down, (IMAGE R) you will see the hole in the hard plastic bumper as well. You will take the large washer on the SAE threaded bolt and drop it down from the top through the hole in the hard plastic bumper and bumper cover. (IMAGE S)



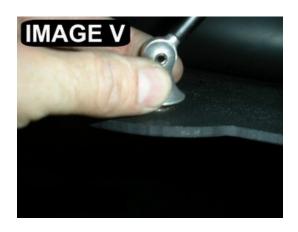
13. You can now install one side of the Air Splitter brace to this bolt. The image at the right (IMAGE T) is one side of the Air Splitter brace. You might find it easier to unscrew it from the rod as shown to install on the car.

**NOTE:** One side of the rod is reverse threaded. Make note of which direction the end unscrews from the rod



14. Once these upper mounts are secured, you can then mount the lower portion of the braces outward to the splitter. We left the mounting location your decision, but recommend the area where the front of the splitter curves out an extra inch. An easy trick is to paint the bolt head with a bright colored paint marker and while the paint is still wet, mark the spot where you want to drill. (IMAGE U), (IMAGE V) and (IMAGE W)













15. Again, make sure you're even on both locations, drill once! (IMAGE X) Install the supplied Allen head bolt to secure the brace to the splitter. Now you can extend the braces as you see fit. There is a lot of adjustment in them. You can use a level to fine tune the degree of angle to balance both sides. (IMAGE Y) Once you have them set, secure with the lock nut located on one side of the brace.

**NOTE:** Make sure the bolts securing the top of the strut and the bottom of the strut are secure. We recommend using **BLUE** medium strength threadlocker on these bolts to keep them from vibrating loose.

#### **Strut Adjustment**

The strut is adjustable and one side has reverse threads. Turning the black center rod of the strut you can lengthen or shorten the strut as needed. Adjust length to set degree of level you prefer. Finally, tighten lock nut with 7/16" wrench to insure it doesn't move.

## **Cleaning and Care**

When cleaning your Track Dog Racing Air Splitter, do not use high-pressure water directly on the label as it might remove it. Do not apply wax directly to the Air Splitter as it will be difficult to remove the dry film from the textured surface. Using an oil-base product that you would normally use on vinyl will enhance the appearance.

We hope you enjoy your new Track Dog Racing Air Splitter. We are adding new products continuously so visit us often.

We appreciate your business,

The Track Dog Racing Team



**Notes:**