

## **Installation Instructions**

**BX1175 Brake Ducts**

**89-05 Mazda MX-5 Miata**

**Braking systems should only be serviced by experienced *and* skilled persons possessing the correct tools for the task. Improperly serviced, installed or maintained brake systems are dangerous. Do not take this responsibility lightly. Race equipment, including brakes should be inspected regularly for material fatigue, excess wear and damage from use.**

- Do not allow grease, oily fingerprints or brake fluid to contaminate the brake pads or rotors.
- Check torque on every fastener, connection, plug and thing you touched before lowering car to ground. *Twice*.
- TEST the brake pedal after completing installation of the kit, BEFORE lowering car to ground.

### Included parts

- 1x Brake duct 1175, right
- 1x Brake duct 1175, left
- 1x Backing plate, right
- 1x Backing plate, left

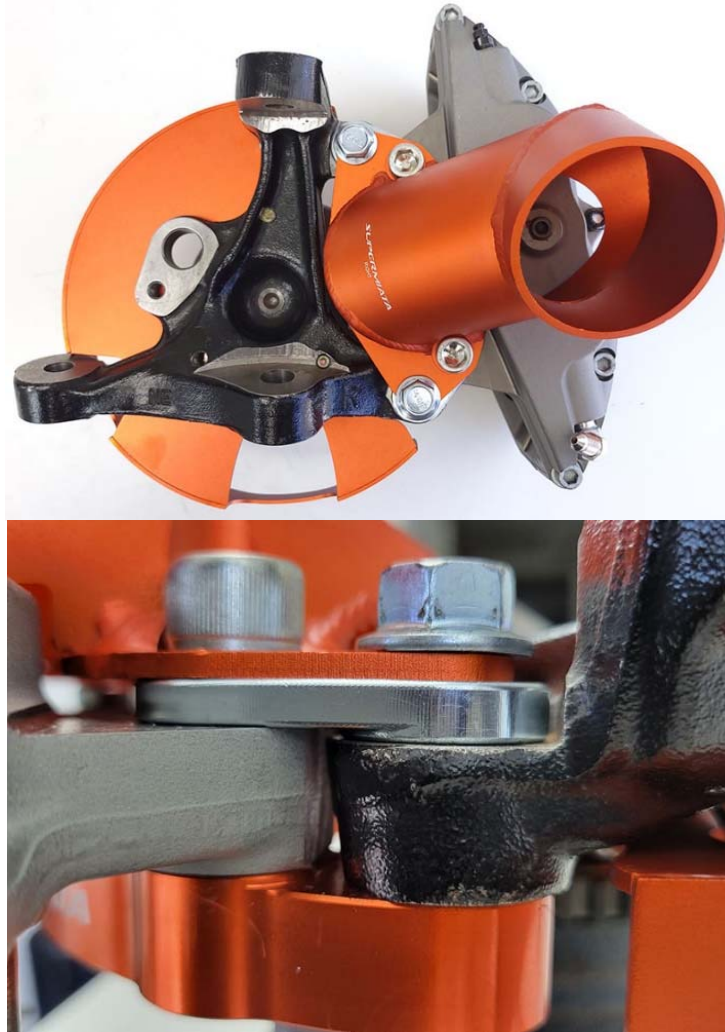
### Installation instructions

1. Loosen and remove caliper bracket bolts
2. Remove caliper and rotor
3. Remove hub and OEM dust shield
4. Place Supermiata shield on spindle as shown



5. Torque OEM shield bolts to 20 ft-lb (15 Nm)
6. Install hub and rotor.
7. Delete 3/8" flat washers under SHCS caliper bolts

8. Place duct on caliper/spindle as shown



9. Minor clearancing of ducts or shields with a file may be required. The thin welded structures vary and are designed to fit snugly.

10. Torque all four caliper mounting bolts to 45 ft-lb / 61 Nm

11. Check caliper function. Wheels should spin freely with brakes off.

12. With car still on jack stands, steer wheels full left and full right to check for interference

*Note: Oversize wheels/tires may reduce steering lock. Verify brake hose routing with as much steering lock as the car is capable of.*

13. Perform road test at low speeds. After road test, place car on two jackstands again, set parking brake and remove front wheels. Perform final visual inspection of system for fastener torque, brake hoses, ducts.

#### **Post install notes**

If you manage to spin your car, check the ducts and hoses before next session.

You can put a slight twist into the brake hoses to get them to stay where you want them.

## A few notes on getting the best performance out of your brake ducts

Recommended shopping list from [Aircraft Spruce](#) for connecting your ducts to the nose of the car. This assumes a flat plastic style air dam.

- 05-29812 : 3" duct hose x 7'. You will need about 3.5' per side
- 10350-12 : 2x 3" Duct flanges
- QS200-52H : 4x Clamps to secure hose to flanges

Reduce bends in hose to absolute minimum. Every time the hose changes direction even a few degrees, the air flow is reduced. The greater the bend, the greater the flow reduction. Source air from high pressure area in front of car. Airflow entering duct flange does not need to be direction of car, it just needs to be a spot where air pressure is building up. That will force air into the hose. Good hose will stay on the duct without anything securing it. Zip ties are lower profile than hose clamps and less likely to interfere with wheel or brake hoses. Pay attention to screw location on hose clamp as it needs to clear wheel.

**Miatahubs brand billet hubs with ABS rings** require modification to knuckle. All other hubs, including Miatahubs non-ABS can use OEM bolts. Use 19/64 or 5/16 drill (7.2mm or larger) to countersink tapped hole in knuckle 1/8" (3mm). Use special low profile bolts in this kit to attach shield for Miatahubs ABS hubs only.

Youtube video about our brake ducts <https://youtu.be/tmL4I7heVIA>

## More info about [NA/NB Miata brake systems](#)

Follow us [YouTube](#) /949racingsupermiata [Facebook](#) /supermiata [Instagram](#) @supermiata

[info@949Racing.com](mailto:info@949Racing.com) 949-716-3111

[www.SUPERMIATA.com](http://www.SUPERMIATA.com)

