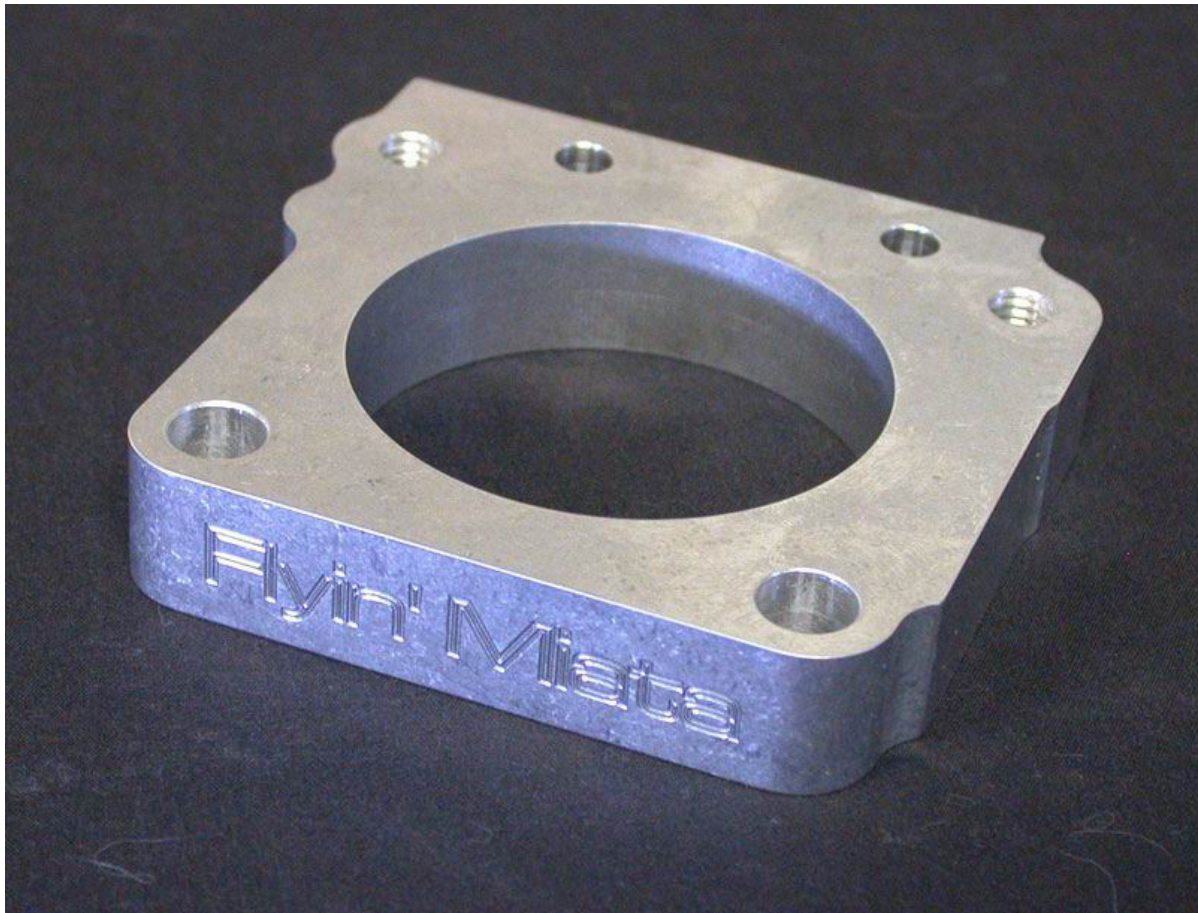


Flyin' Miata

Throttle Body Adapter Plate 05-40000



Congratulations on purchasing our Throttle Body Adapter Plate! The FM Throttle Body (TB) adapter was conceived to make installing a 1.8 engine into a 1.6 chassis much easier by allowing the use of the 1.6 throttle body on the 1.8 intake manifold. **This will require drilling and tapping!** Please call or email us if you have installation questions. Our phone number and email are below.

WARNING: Not everyone can perform every installation. It is critical that you be honest with yourself in regards to your ability. We're more than happy to help, but there are only so many things we can do from the other end of a phone / computer. If in doubt, discuss the install with us before you dive in. Improper installation could cause injury and / or death!

Required tools:

- **Standard metric socket and/or wrench set**
- **5mm or 3/16" drill bit**
- **M6x1.0mm tap**
- **JB Weld (optional)**

Acronyms:

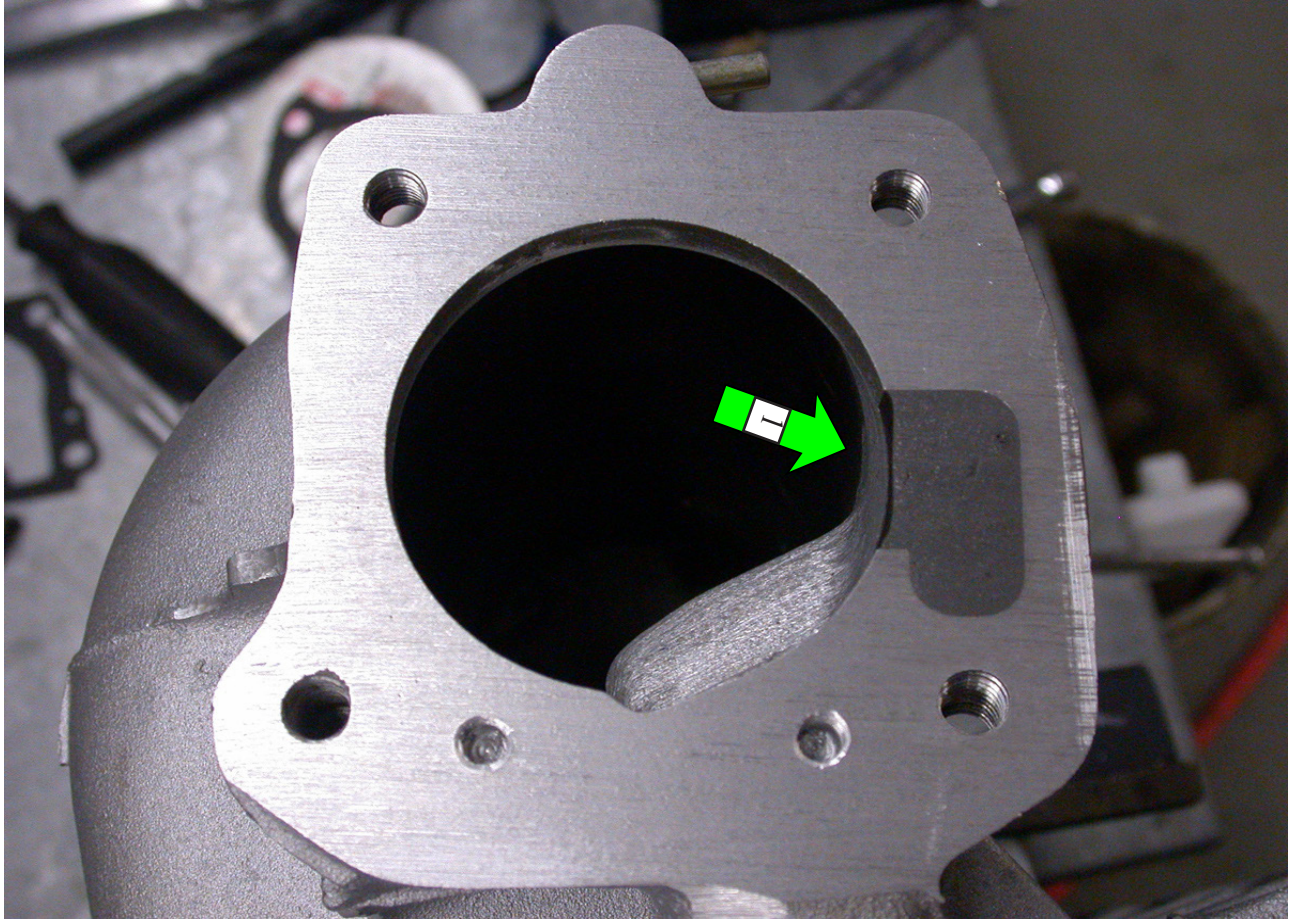
- **TB = Throttle Body**

Torque specs:

- **44-78 lb-in for M6 bolts**
- **14-18 lb-ft for M8 bolts/nuts**

1. If you haven't already done so, unbolt the 1.8L TB from the intake manifold. Stuff some rags into the 1.8 intake plenum to keep dirt and shavings out.
2. Slide the adapter plate onto the stock studs of the 1.8L manifold. You should be able to read the Flyin' Miata logo without standing on your head if it is installed in the correct orientation and you're standing in front of the engine. The two counterbored holes will also be facing you.
3. Using the counterbored holes as a guide, drill two 5mm or 3/16" holes into the intake manifold. Remove the adapter plate and tap both holes using a M6x1.0mm tap. Very carefully remove any shavings, etc. from the manifold.
4. Remove the upper two studs from the manifold (the ones that held the original throttle body). Use two M8x1.25 nuts locked tightly against each other to unthread the studs.
5. **(Optional)** There is a recess in the intake manifold casting on the right side as you look at the TB mounting surface. This can be filled with JB Weld for best airflow (1). You can use tape and/or the FM TB adapter temporarily fixed in place to help keep the JB Weld from spilling out, though you'll probably need to go back and sand/grind

the JB Weld to match the inner profile of the manifold. Make sure that the mating surface of the manifold to TB is flush so that you can still bolt up our TB adapter plate. Carefully use a file to bring down any high spots in the JB Weld.



6. Apply a very light coating of silicone sealant on the rear face of the adapter and a drop of blue Loctite on the threads of the two M6 socket head bolts (36-10036). Screw the two upper M8 bolts (36-10426) in temporarily just to line the holes up and then install the two M6 socket head bolts in the countersunk holes and tighten them to 44-78 lb-in. Remove the temporarily installed M8 bolts.
7. Using the stock TB gasket, install the 1.6L throttle body using the stock M8 bolts in the top two holes and the provided M8x1.25x40mm bolts (36-10426) and washers (36-30130) in the lower two holes. Torque the M8 bolts to 14-18 lb-ft.

Notes: Obviously, the adapter will require some adaptation of the throttle body inlet tube to make up for the thickness of the spacer. You will also need to either fabricate a simple bracket to relocate your stock throttle cable bracket back on the intake manifold or purchase our throttle cable adapter bracket (04-70005). Please feel free to call or email with any suggestions to improve either our directions or the product.