

# **DDMWorks**

Automotive Performance Specialists

## 90-93 1.6L Miata Intake

### Packing List:

The Following Parts should be in your intake kit when it arrives. If you can not find all of the parts listed below, please contact DDMWorks.

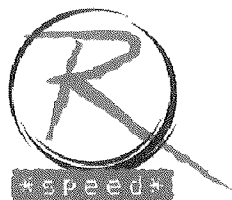
- Stainless Steel Intake/Heat Shield
- Molded Plastic Square to Round Adapter/gasket
- 3" Inlet Uni Dual Stage Foam Filter
- Bag of Installation hardware
  - 2 10mm hex head bolts
  - 1 13mm hex head bolt
  - 2 Flat washers small
  - 2 Lock washers small
  - 1 Flat washer Large
  - 1 Lock washer Large
  - 4 Phillips pan head bolts
  - 2 DDMWorks Stickers

## **DDMWorks**

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4-26-07IM



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## Air Intake 90-93 1.6L Miatas

Installation time of this intake depends on you and your mechanical skills. It is suggested that you read through these directions a few times to familiarize yourself with the components of the kit, and your car.

If you are pretty handy with tools the intake can be installed in under 15 minutes, however we suggest that you schedule at least an hour for the install.

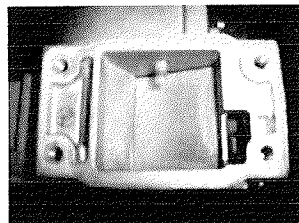
### Tools you will need:

Sockets:	10mm socket
	12mm socket
	13mm socket
	Socket wrench
	Long 8" socket extension
Screwdriver:	Phillips, Flat Head



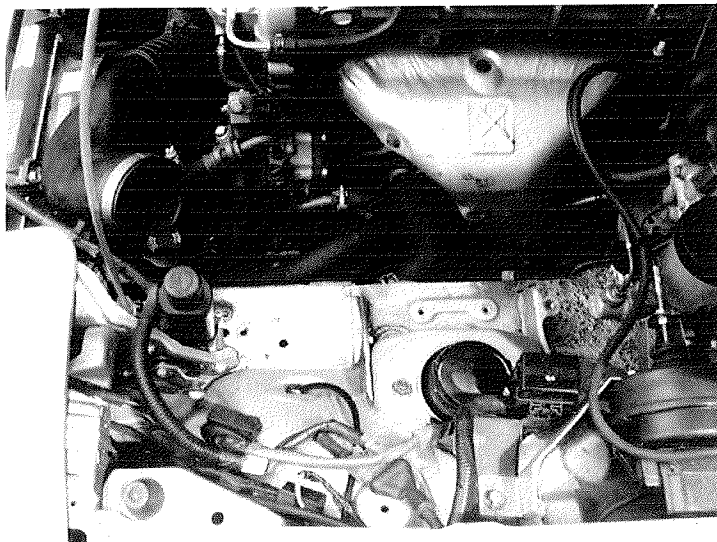
## Removal of Stock Filter Assembly

1. On the back of the stock air filter box is a plastic tube held in with a hose clamp. Using a screwdriver, loosen this hose clamp. On the other end of the plastic tube, a 10mm hex head bolt holds it in place. Remove the bolt holding that end in place and pull the plastic tube off the back of the stock air box. You will have to work the piece out under the brake lines. Once the piece is removed, reinstall the bolt you removed, securing the diagnostic box, set aside the plastic tube, we will not be re-using it.
2. Now loosen the hose clamp that is securing the stock crossover tube to the front of the air flow meter. Once the hose clamp is loose, pull the stock crossover tube off of the air flow meter.
3. There are four 10mm head hex nuts on the lid of the stock intake box that hold the air flow meter in place. Loosen and remove all 4 nuts and set aside, we will not re-use them. There is also a 10mm head hex bolt and bracket on the front of the lid that you will need to remove, it will not be re-used.
4. With the nuts and small bracket removed, you should be able to remove the air flow meter from the lid of the stock airbox. We need to remove the four studs that held the air flow meter in place. With a pair of



needle nose pliers, or channel locks, twist the metal studs out of the air flow meter. With all four studs removed, the back of your air flow meter should look like the picture to the left. Once the air flow meter is removed, wrap it in something to protect it and set it by the headlight.

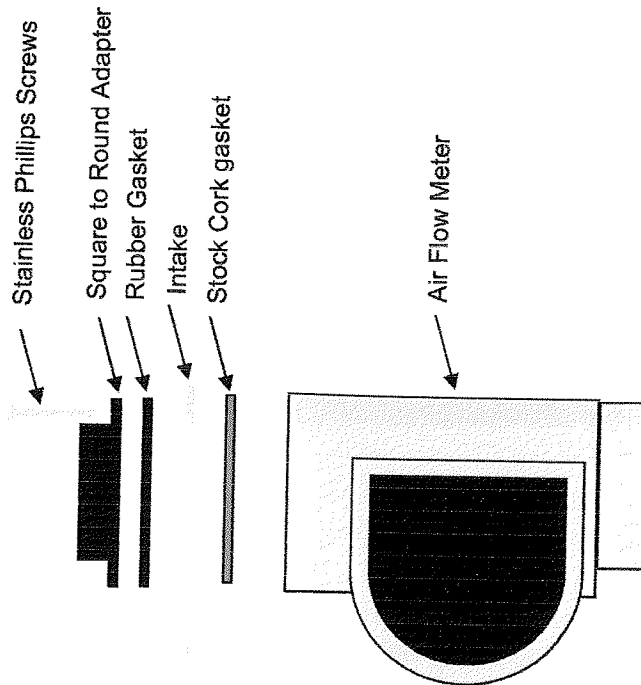
5. Now we are going to remove the stock air box. There are two 12mm head hex bolts and one 12mm hex head nut holding it in place. Once you remove these the air box should be able to be removed from the car, set it aside, as we will not re-use it.
6. There is a metal bracket underneath the stock air box held in place with two 10mm hex head bolts. Remove these two bolts and the bracket from the car.
7. Your car should look like the picture, if so, we are now ready to install the new intake on your car.



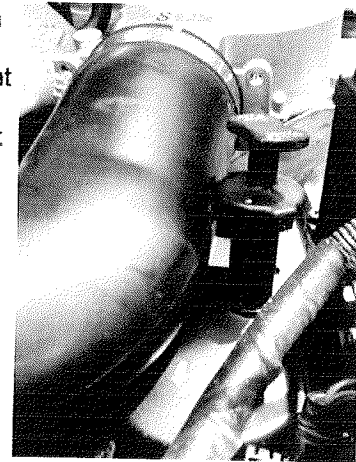
## Installation of Cold Air Intake Bracket

1. Get the new intake heat shield out of the plastic and set it in the car. We will first attach the air flow meter to the intake shield. The air flow meter gets attached to the intake with the four Phillips pan heads in your hardware kit. The picture to the right shows the proper order for everything to go:
2. Once the air flow meter is attached to the new intake shield, we will install the intake into the car. Find the 13mm head hex bolt, large lock washer and large flat washer. This will secure the intake in the back under the brake master cylinder.
3. Next two 10mm head hex bolts, small lock washers and flat washers will secure the intake in the front.

**Hint:** Get all of the bolts started before tightening any of them down, this will make it easier to get all of the bolts to line up correctly.



4. Once the intake is secured, we will put the stock intake crossover tube back on the front of the air flow meter. It is a little bit of a tight fit if your car has power steering, as the intake crossover tube will rest on top of the power steering reservoir, but it will slip on the front of the air flow meter.
5. Now take your new foam filter out of its bag and loosen the hose clamp on it a few turns to make it easier to fit. Slide the new filter onto the black square to round adapter and snug the hose clamp down. If you tighten the hose clamp on the filter too much, it will pop off of the adapter, the clamp just needs to be snug.
6. Do a once over and make sure all hose clamps and bolts are tight, close the hood and go enjoy your new intake!



**Congratulations!**

You did it! If you have any questions feel free to call or send us an email. If you have a digital camera, send us a picture of the intake installed on your car, we would love to see it!

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