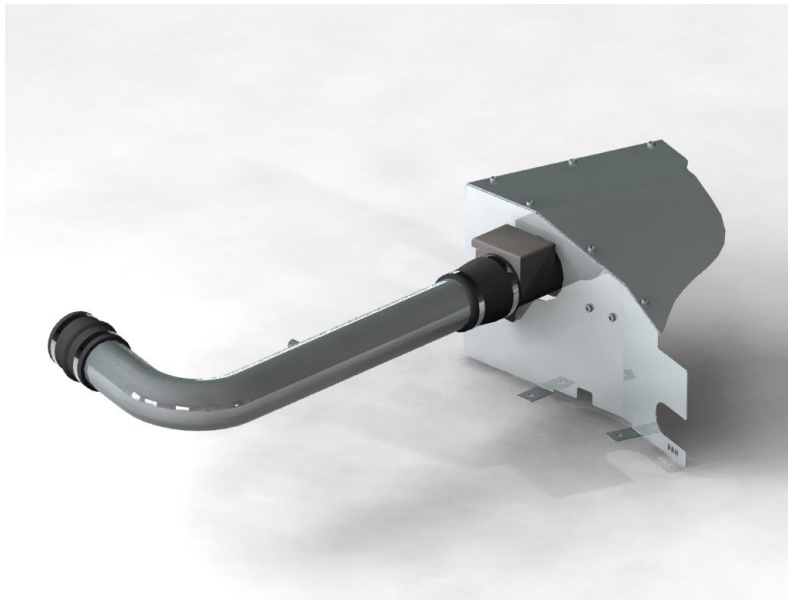


DDMWorks—Race Intake for 1999-2005 Mazda Miata



This DDMworks Race Intake improves your Mazda Miata by supplying your engine with cold pressurized air for it to breathe in through a free flowing filter with a tube using the absolute minimal amount of bends.

Installation time of the Cold Air Intake depends on you and your mechanical skills.. If you are pretty handy with tools the intake can be installed in under 30 minutes, however we suggest that you schedule at least two hours for the installation.

Tools you will need:

Wrenches:	10mm, 12mm
Sockets:	10mm, 12mm Socket wrench Long 8" socket extension
Screwdriver:	Phillips, Flat Head
Misc.	None

If you need detailed instructions, they can be found by downloading them here:

http://ddmworks.com/Miatastore/store/miata_engine/ddm_air_intakes_stage2.html



DDMWorks—Race Intake for 1999-2005 Mazda Miata

Part No: DDM-05-017

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.

Qty.	Part Description	Part Number
1	Stainless Steel Intake/Heat Shield	DDM-05-015
1	Stainless Steel Lid (installed on heat shield)	DDM-05-016
1	Stainless Steel Bracket	DDM-05-018
1	K&N Filter	
	Bag of Hardware	
6	Button Head Screw M6 Size, 12 mm Length (installed on lid)	92095A226
2	Silicone Hump Hose	SHH63-BLACK
3	2-1/16" to 3" Hose Clamp	5415K22
1	2-9/16" to 3-1/2" Hose Clamp	5416K24
19	Flat Washer M6 (6 installed on lid)	93475A250
3	M6x1x20 Hex head	91287A137
9	Lock Washer M6	92148A180
4	M6 nuts	
4	Button Head Screw M6 Size, 20 mm Length	92095A240
1	Rubber Grommet (installed)	9307K25
1	Metric Short Arm Hex L-Key 4.0 mm Hex	7289A15
1ft	Push-on Edge-Trim Rubber Seal Bulb (installed)	1120A222
2	M6x1x8 (short hex)	
2ft	Rubber Edge Trim (installed)	8507K11
	Other	
2	DDMWorks Stickers	

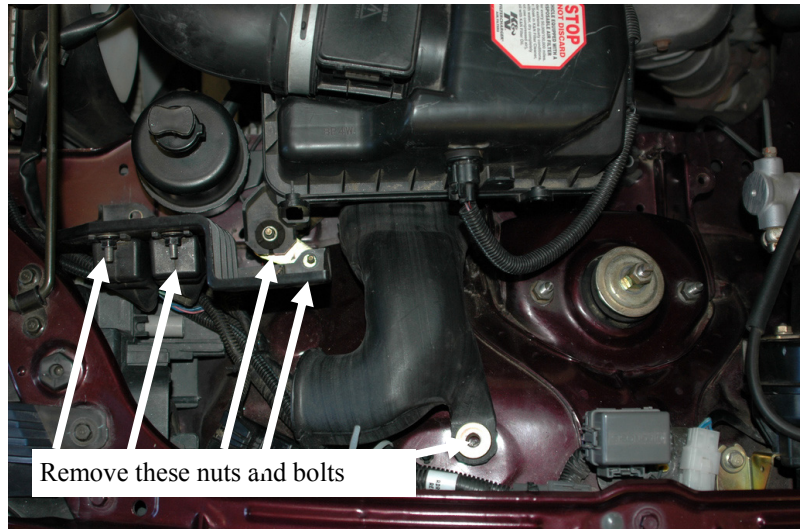


99 South Harris Road
Piedmont, SC 29673

9-27-07 DLM

Removal of stock intake system

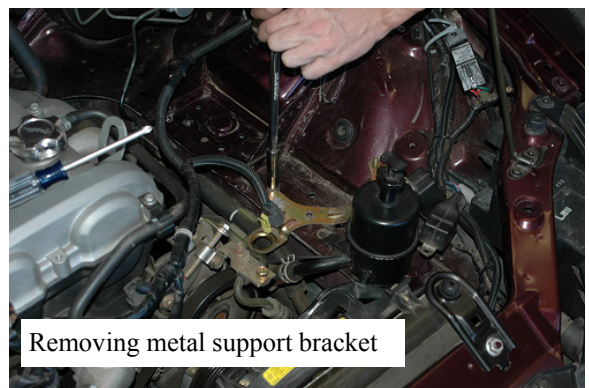
1. Remove the snorkel on the factory air box by removing the 10mm head hex bolt holding it in place. Once the bolt has been removed, the snorkel will pull off of the air box.
2. There is one 12mm head hex bolt holding the back of the air box in place, remove that bolt. There is also a 12mm hex head nut holding the front of the air box, remove that nut also.



3. Once you have removed the bolt and nut, gently pull on the intake air temp sensor located on the fender side of the air box. The intake air temp sensor will pull right out of grommet holding it in place. We also need to unplug the air flow meter that is on top of the factory air box. The air flow meter plug has a tab to push and will allow the plug to be pulled off of the air flow meter. Lastly there is a plastic slip holding the air intake temp wire to the air box, use needle now pliers to release that clip from the stock air box.
4. Once both the intake air temp sensor and the air flow meter are unplugged, use a Phillips screwdriver and loosen the hose clamp on the black factory crossover pipe that is attached to the air flow meter. After you loosen this hose clamp, gently pull the crossover pipe off of the air flow meter. You should be able to remove the factory air box from the car at this point. Take the factory air box and set it aside for now.



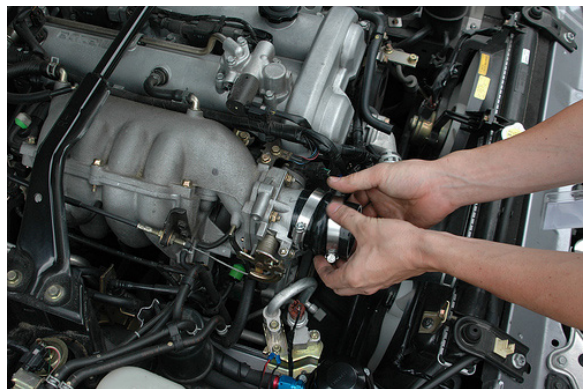
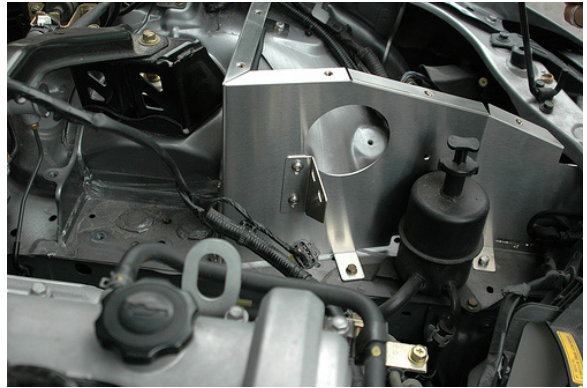
5. There is a small breather line connecting the crossover tube to the valve cover, remove this line from the crossover tube only.
6. Now look over by the throttle body and loosen the hose clamp holding the crossover tube to the throttle body, once this hose clamp is loose remove the crossover tube from the car, it is not re-used.
7. You need to remove the factory relays located behind the headlight on the black piece of vertical plastic. Using your 10mm socket wrench, loosen the nuts and bolts holding the relays in place and remove the relays from the vertical plastic piece. Keep the bolts and nuts in a safe place, we will be re-using them later.



8. Next remove the black plastic vertical piece by removing the 10mm head bolt holding the front of it and the 10mm nut holding the back, remove this piece from the car, it will not be re-used.
9. Now you need to remove the metal support bracket that was under the factory air box. This bracket is held in place with two 10mm head bolts. Use your socket wrench to remove these bolts and then remove the metal bracket from the car, it will not be re-used.
10. Now find the factory air box that we removed earlier, we need to remove the air flow meter from the air box. There are two 10mm head bolts holding the air flow meter in place, remove both of these bolts. Once those bolts are removed the air flow meter will pull out of the air box. Just pull gently and make sure you do not put your fingers inside of the air flow meter, as you can damage it.
11. Your car should now be ready to receive the new intake.

Installing the new DDMWorks—Race Intake for 1999-2005 Mazda Miata

1. First you will need to remove the lid from the intake using the supplied Allen wrench to remove the bolts holding the lid on.
2. Once the lid is removed, place the lower part of the intake into the car being careful to feed the front of the intake under the front of the car and feeding the wires through the “U” shaped cut out in the intake
3. Once the intake is in, secure the intake to the car using the supplied 6mm bolts and washers.
4. With the base of the intake installed attach the small MAF holder bracket to the intake as shown in the picture to the right. You will need two M6 bolts, washers and nuts to secure the bracket in place.
5. With the MAF bracket in place you need to now attach the Air Flow Meter to the MAF bracket you just installed.
6. Now find one of the silicone hump hoses supplied in the kit and put hose clamps on both sides of the connector. Then slide one end over the air flow meter as shown. This will be a little difficult to do, make sure the hose clamp is loose enough and a little WD40 on the inside of the silicone connector will make it much easier also.
7. Slide a hump hose connector over the throttle body also and place a hose clamp on each end of it also.
8. Now find the stainless connecting tube in the kit and insert it into the air flow meter silicone connector first and then into the throttle body silicone connector
9. Once the tube is inserted all of the way, tighten down all 4 hose clamps which will secure the tube in place.
10. With the crossover tube in place you need to install the K&N filter onto the end of the air flow meter inside the air box.
11. Also you need to attach the rubber hose from the valve cover to the tube on the crossover tube.
12. There is a place on the back of the air box to install the intake air temp sensor, insert the temp sensor into the rubber grommet on the back of the air box.
13. You will also need to attach the relays to the air box using the supplied hardware. There are two holes to attach the relays that you will find just behind the power steering reservoir.
14. Re-attach the lid to the intake using the bolts that you removed earlier.
15. Check all hose clamps and bolts to make sure they are secure
16. Re-attach the electrical connector to the air flow meter at this time if you removed it earlier.
17. Start the car and enjoy!





Thanks for installing a DDMWorks intake, please let us know how you like it and if you have any suggestions by emailing us at Dave@DDMWorks.com or giving us a call at 864-907-6004.