



Cold Air Induction Kit

Installation Instructions

'90-'93 Miata

PART # 901-985

CARB EO: D344-4

Thank you for choosing Jackson Racing for your Miata performance parts. You will find the Jackson Racing Cold Air Induction Kit easy to install. Stock components removed should be placed in boxes or plastic bags and marked for easy identification. A Mazda service manual may be helpful when working on your Miata. (Miata Enthusiast Manual, #211-505.)

This system was designed for use only on the Mazda Miata MX-5 90'-93'. The engine should be in good running condition prior to installation. The air filter provided is washable and reusable. Use a maintenance kit for foam air filters (#901-970). Do not use a K&N cleaning kit as it is designed for cotton filters only.

**Please read these instructions completely before installation. You should be able to install the Cold Air Induction Kit using normal tools. You will need a small amount of antifreeze on hand as you will see in the instructions.*

If there are any questions, please call our staff at 1-800-642-8295

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Goleta, CA 93117

Installation Instructions

Tools required:

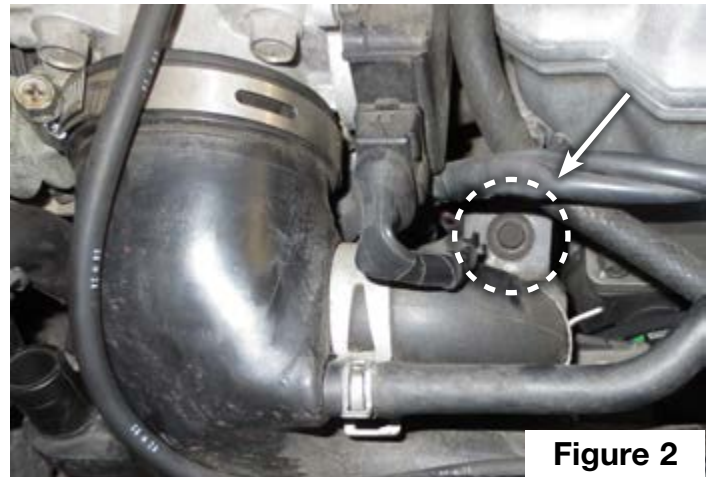
- $\frac{3}{8}$ " Ratchet
- 6" Extension for $\frac{3}{8}$ " Ratchet
- 12mm Socket
- 10mm Socket
- $\frac{1}{8}$ Flat head screwdriver
- $\frac{1}{4}$ " Flat head screw driver
- Phillips head screwdriver
- Needle nose pliers

- Jack
- Jack Stands
- Drain Pan
- Coolant resistant silicone
- Gasket Scraper
- Coolant or distilled water
- Temporary hood prop (broomstick, 2x4, etc...)

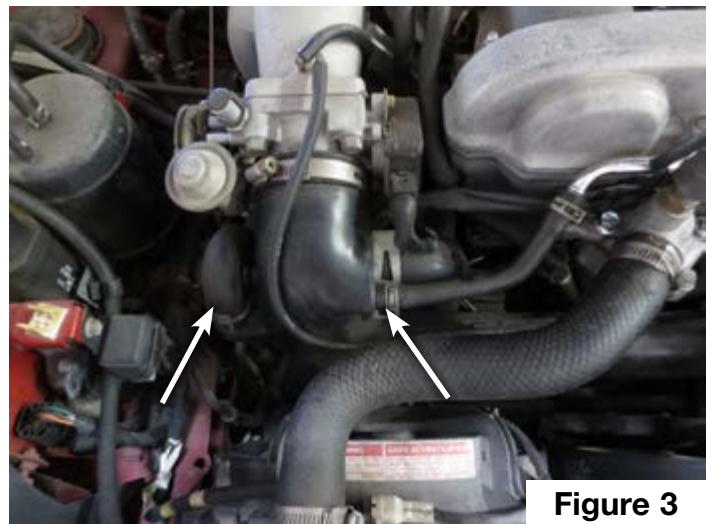
- 1) Disconnect the battery and ensure that the engine is cool before performing any work.
- 2) Lift and support the vehicle with a jack and jack stands.
- 3) Remove the under tray and place a drain pan underneath the front of the engine.
- 4) Detach the upper radiator hose and allow any coolant to spill into the drain pan.
- 5) Use a ratchet and 10mm socket to loosen the two hose clamps connecting the intake to the throttle body and air flow meter. See Figure 1.



- 6) With the same ratchet and 10mm socket, remove the bolt securing the intake to the bracket on the driver's side of the throttle body. See Figure 2.



- 7) Disconnect the idle air control hose and crank vent hose attached to the intake tube near the throttle body. If the vehicle has cruise control, separate the actuator's vacuum line from the intake tubing. See Figure 3.



- 8) Lift the intake tubing from the vehicle and set it aside, it will not be used with the cold air induction kit.

- 9) Locate the air box and snorkel on the driver's side of the engine bay. Remove the snorkel by unfastening the 10mm bolt which holds the snorkel, air bag connector, and the diagnostic connector. Loosen the hose clamp and grasp the snorkel where it attaches to the air box and gently pull straight out towards the rear of the vehicle until they separate. The snorkel will not be reused, but reinstall the bolt secure the diagnostic and airbag connectors. See Figure 4(A)

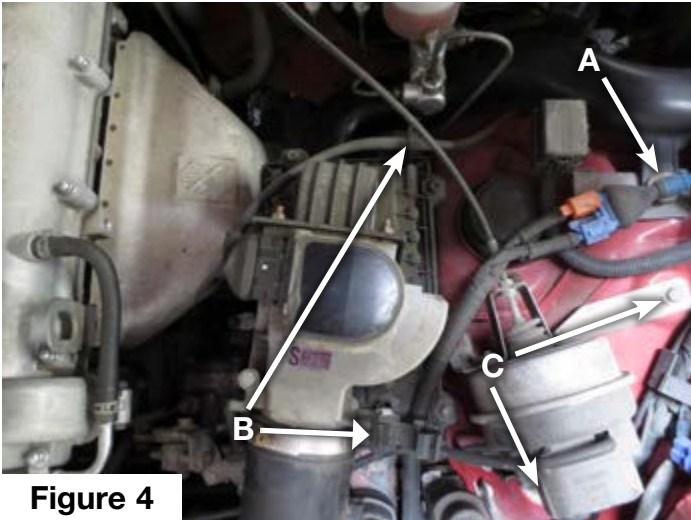


Figure 4

- 10) Detach the connector from the air flow meter using a small flat head screwdriver. There will be two clips holding the wiring to the air box that will need to be removed. Use a pair of needle nose pliers to gently release the back of the clips, making sure not to break the plastic. See Figure 4(B)
- 11) Remove the two bolts and one nut at the front, rear, and side of the air box, using a ratchet, extension, and 12mm socket. If the vehicle has cruise control, the two bolts for the actuator will also need to be removed. See Figure 4(C)
- 12) Lift the air box from the engine bay, and place it in a clean work area where the air flow meter can be removed.
- 13) Separate the air flow meter from the air box by removing the four 10mm nuts on the rear of the air box. The gasket and air flow meter will be reused.
- 14) Locate the new Jackson Racing air box included in the kit. If the top and bottom of the air box came assembled, disassemble them. Install the air flow meter and gasket into the bottom section of the air box. The air flow meter will be installed sideways with the grid side towards the rear of the air box. Install the air flow meter with the included four nylon locking nuts. See Figure 5

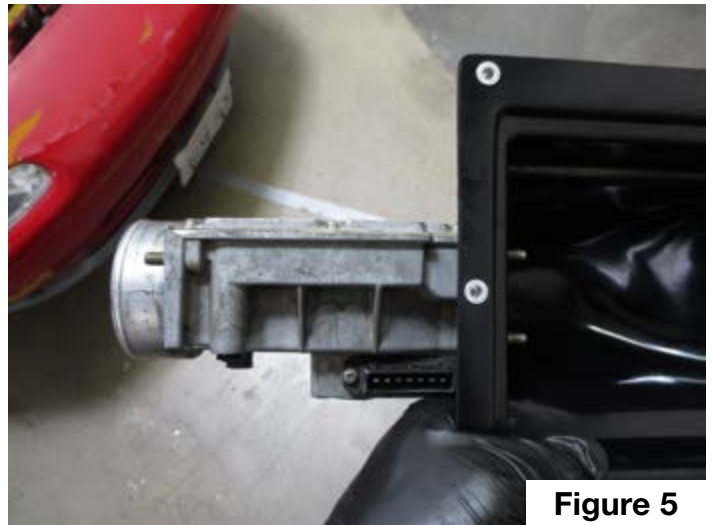


Figure 5

- 15) Locate the air bag sensor near the front center of the engine bay. Grab the front and rear of the cover and gently pull up to remove it. This cover will not be reinstalled. See Figure 6

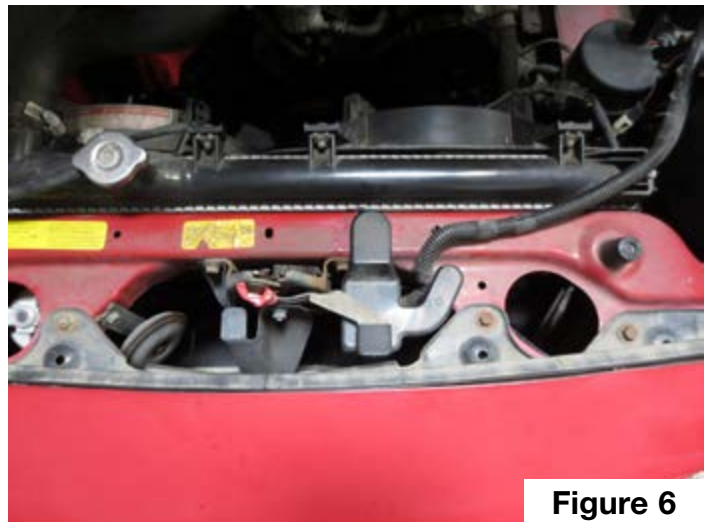


Figure 6

- 16) Unfasten the two 10mm bolts holding the sensor to the radiator support. Follow the wiring from the air bag sensor to the blue and orange connectors and disconnect them. Reroute the wiring under the radiator support, making sure the wiring does not interfere with the operation of the headlight or fan. See Figure 7

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Figure 7

- 17) Reinstall the airbag sensor with the stock bolts, and reconnect the blue and orange connectors on the other end of the wiring.
- 18) Remove the top of the thermostat housing by unplugging the coolant temperature sensor, and unfastening the two 12mm bolts. The thermostat cover will be reused, but the two bolts will not. See Figure 8



Figure 8

- 19) Leave the thermostat in place, and remove the old gasket. Clean both surfaces of the thermostat housing to ensure that it will seal properly.
- 20) Locate the thermostat spacer, two gaskets and two M8x 50mm bolts included with kit. Remove the backing on both of the thermostat gaskets and use the adhesive to attach one to each side of the thermostat spacer. Apply a thin layer of silicone to the other sides of each of the gaskets.

- 21) Reassemble the thermostat housing with the spacer, gaskets, and two M8x50 bolts. The bracket on top of the thermostat housing should be bolted down as it was before the spacer was installed. See Figure 9



Figure 9

- 22) Find the elbow, silicone sleeve, and two hose clamps included in the kit. Place the sleeve over the smaller end of the elbow and secure it with a band clamp using a Phillips head screwdriver. Place the elbow and sleeve over the opening of the throttle body with the brass fitting facing toward the driver's side of the car. Secure the sleeve to the throttle body. Connect the Idle air control valve, and the crank vent hose to the new elbow. Use the included 1" hose clamp to secure the crank ventilation hose to the brass fitting. See Figure 10



Figure 10

- 23) Locate the accordion flex duct and two band clamps. Attach the accordion flex tube to the other end of the elbow, and secure it with one of the band clamps. See Figure 11



Figure 11

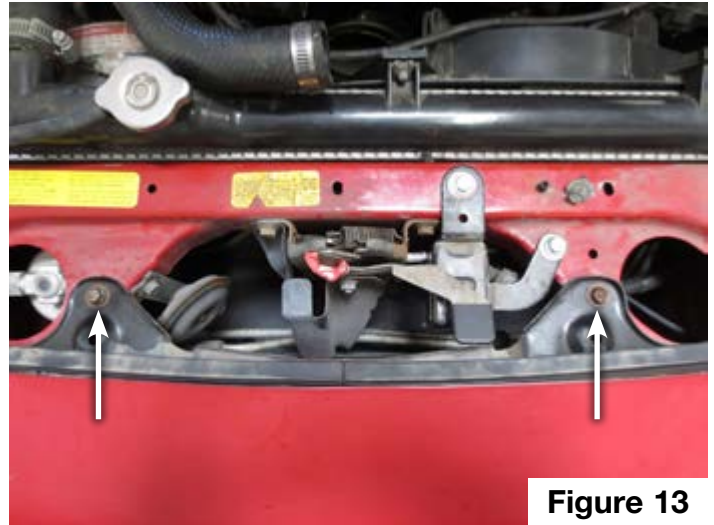


Figure 13

- 24) Place the lower section of the air box into engine bay just behind the radiator fan on the driver's side. Slide the air flow meter into the accordion flex tube and secure it with a hose clamp. Ensure that the accordion flex duct compresses equally on all sides. If the vehicle is equipped with cruise control, route the vacuum line for the actuator under the air box. See Figure 12

- 27) Line the two mounting holes of the air box up with the bolt holes made from removing the bolts in the last step. Secure the lower air box with the two M6x25 bolts and washers included with the kit. See Figure 14

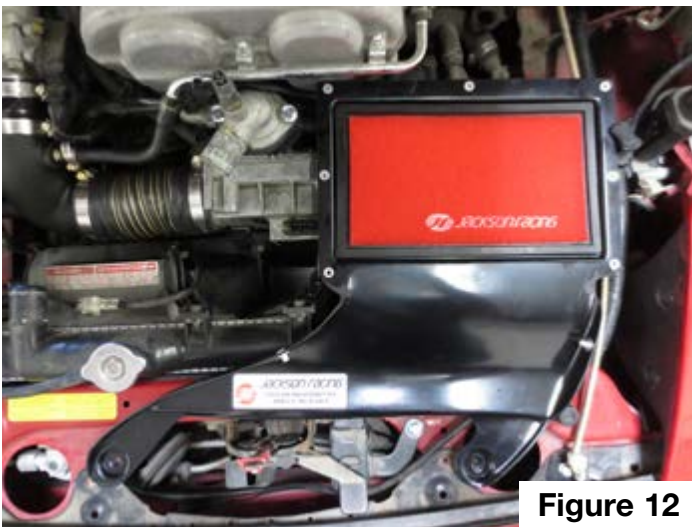


Figure 12



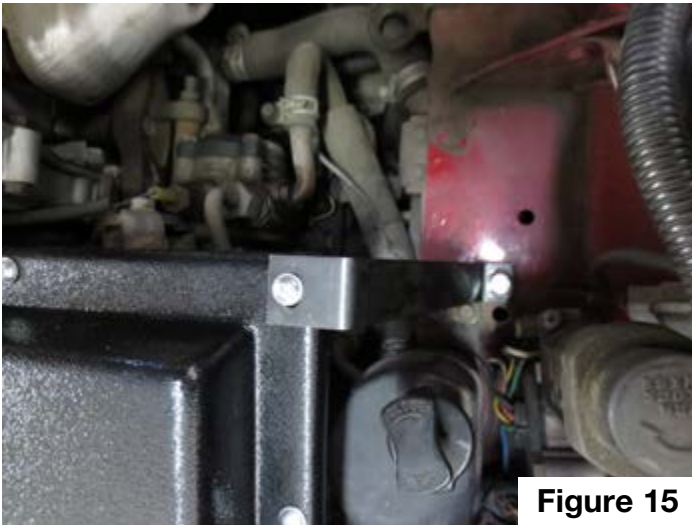
Figure 14

- 25) Place the included air filter into the air box with the red side facing up. Push it down into place to ensure that it seals. Next, attach the top of the air box with the included washers and screws. Do not put a screw in the drivers side rear corner of the air box, this will be used to mount the support bracket. See Figure 12

- 28) Install the air box support brackets onto the rear driver's side corner of the air box with the remaining screw and washer. The bottom of the bracket is secured using the same bolt hole that held the front of the stock air box in place. Fasten the bottom of the bracket with the included 8x20mm bolt. See Figure 15

- 26) Remove the two bolts securing the front radiator support with a 10mm socket; these bolts will not be reused. See Figure 13

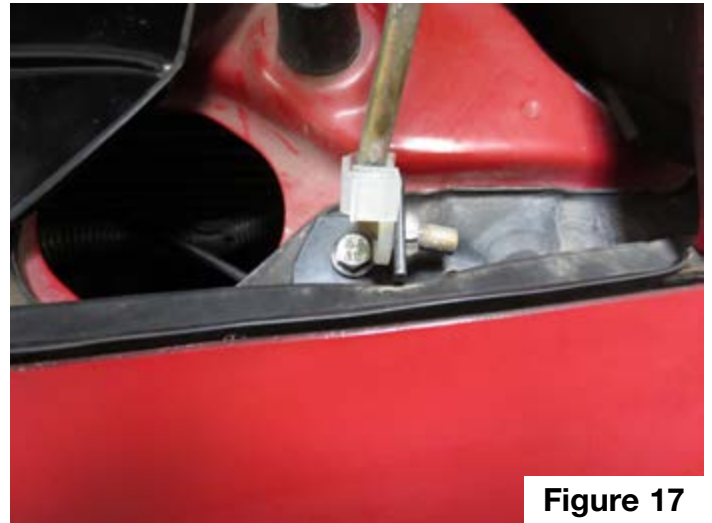
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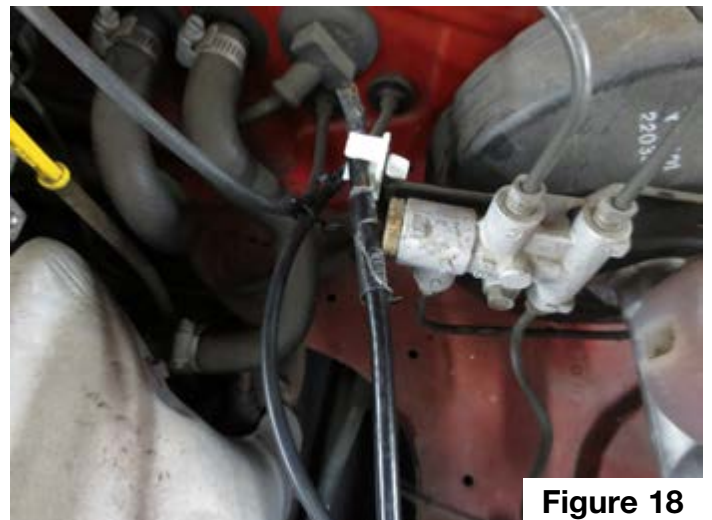
- 29) Use the included wire harness extension to connect the stock wiring harness with the air flow meter. Use the front driver's side bolt in the valve cover to bolt the included cable clamp to secure the harness extension. Use the included cable ties to route the wiring harness extension on the crank case ventilation pipe. See Figures 16A & 16B



- 30) Take the hood prop out of the hood and use temporary hood prop or a helper to support the hood. Remove the hood prop from its mounting bracket and set it aside to be reinstalled.
- 31) Remove the bolt securing the radiator support located just in front of the rubber hood stop on the driver's side of the engine bay. Use the M6X12 bolt included in the kit to secure the included hood prop holder in place of the bolt that was just removed. Place the included swivel bracket into the hood prop holder, and install the hood prop into the swivel bracket. The hood prop can now be used to support the hood again. See Figures 17



- 32) Install the included hood prop mount into the square slot on the bracket located on the end of the brake proportioning valve. If the vehicle has cruise control, remove the original clip in the square slot and use a cable tie to attach the cruise control cable to the throttle cable. See Figures 18



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- 33) The original hardware that held the hood prop can now be removed, as well as the bottom mount for the air box or any other unnecessary hardware left on the car.
- 34) Reinstall the upper radiator hose, and top off any coolant lost when the radiator hose and thermostat housing were removed.

- 35) Verify that all the bolts and hose clamps are tight, reconnect the battery, use cable ties to hold any loose wiring out of the way, and start the engine to ensure that there are no vacuum leaks or other issues.

Drive Carefully.

What's Included:



1. Thermostat spacer x1
2. Air box support x1
3. Thermostat gaskets x2
4. Silicone sleeve x1
5. Accordion flex duct x1
6. Hose clamp SAE no. 40 x4
7. Hood prop holder x1
8. Hood prop mount x1
9. Swivel bracket x1

10. M8x50 bolt x2
 11. M6x25 bolt x2
 12. M8x20 bolt x1
 13. M6x12 bolt x1
 14. M6 nylon lock nut x4
 15. Hose clamp #6 x1
 16. M6 washers x2
 17. Cable tie x6
- Continued on next page...

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What's Included continued:



- 18. Air filter x1
- 19. Cable clamp x1
- 20. Intake elbow x1



- 21. Air flow meter wiring harness extension x1
- 22. Air box x1

Although every effort has been made to ensure the accuracy and clarity of this information, any suggestions that you may have that will improve the information (especially detailed installation notes and photos) are welcome. These instructions were developed and written by Moss Technical Support. If you have any questions or difficulties with your installation of this product, telephone 800-667-7872 between 7:00 a.m. and 4:00 p.m., Pacific Time for assistance.

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