



Performance Cold Air Intake Kit

Part Number: 837-165

2003-2009 Mazda 3 2.0L/2.3L Non Turbo
2006-2007 Mazda 5 2.3L Non Turbo

Installation Instructions

For technical inquiries please email us at tech@hpsperformanceproducts.com

In the email, please include the following information for faster response:

- Year / Make / Model / Engine of your vehicle.
- If it is a fitment issue, please include pictures showing the fitment problem.
- If there are missing parts, please list the part number(s) from the bill of materials on the 2nd page.
- Optional but recommended – Your contact phone number and preferred call back time.

You can also give us a call via 626-747-9200 for tech support Monday-Friday, 9:00am-5:00pm Pacific Time.

Bill of Materials
Part Number: 837-165

Line#	Description	Part Number	Qty
1	Upper Intake Tube	627172	1
2	CAI Extension Pipe	627173	1
3	HPS Air Filter	HPS-4274	1
4	T-Bolt Clamps for 2.5" Hose	SSTC-67-75	3
5	T-Bolt Clamps for 2.5" Hose	SSTC-70-78	1
6	2.5" to 2.75" Reducer X 2 3/8" Long	P3SR-250-275-L238	1
7	2 1/2" Hump Coupler X 2 3/8" Long	P3SHC-250-L238	1
8	3/8" Hose X 17" Long	EPDM-038	1
9	10mm Hose X 3" Long	EPDM-038	1
10	CAI Extension Pipe Mounting Bracket	6010052	1
11	Mounting Bracket	530-350	1
12	6mm Hex Head Bolt X 12mm Long	HW-B6-12	2
13	6mm Hex Head Bolt X 20mm Long	HW-B6-20	1
14	6mm Flat Washer, 12mm OD	HW-FW6S	4
15	6mm Flat Washer, 16mm OD	HW-FW6L	2
16	6mm Flange Nut	HW-N6	2
17	6mm Vibration Mount X 1" Tall	HW-RM6-100	1
18	5mm Buttonhead Bolt X 20mm Long	HW-B5-20	1
19	5mm Flat Washer	HW-FW5S	2
20	5mm Nylock Nut	HW-N5	1
21	4mm Allen Head Bolt X 8mm Long	HW-B4-8	2

- Before installing any parts of this intake system, please read the instructions thoroughly.
- Verify the contents of this intake kit before disassembling your vehicle.
- **DO NOT INSTALL IF ANY PARTS ARE MISSING OR DAMAGED. CONTACT tech@hpsperformanceproducts.com IMMEDIATELY. WE ARE NOT RESPONSIBLE FOR ANY DAMAGE CAUSED DUE TO IMPROPER INSTALLATION.**
- Installation requires moderate mechanical skills. A qualified mechanic is highly recommended.
- Do not attempt to install the intake system while the engine is hot.
- This installation may require removal of coolant lines that may be hot.
- For technical inquiries, please e-mail us at tech@hpsperformanceproducts.com

PLEASE READ CAREFULLY BEFORE INSTALLATION!

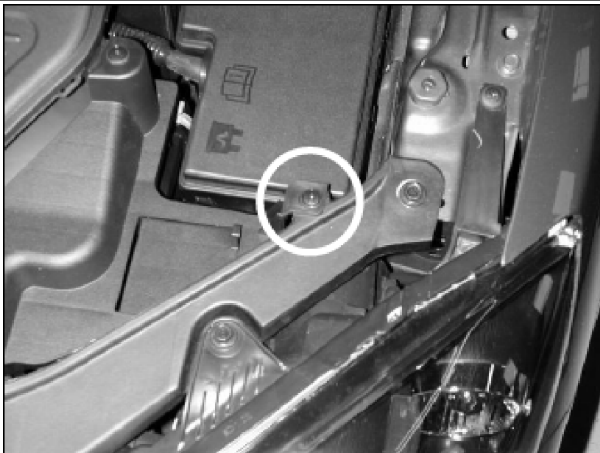
This installation is not for the novice customer. Install this product with EXTREME caution! Misuse of this product can destroy your engine! If you are not mechanically inclined, please have a professional automotive mechanic install this kit.

NOTE: HPS holds no responsibility for any engine damage that results from misuse of this product.

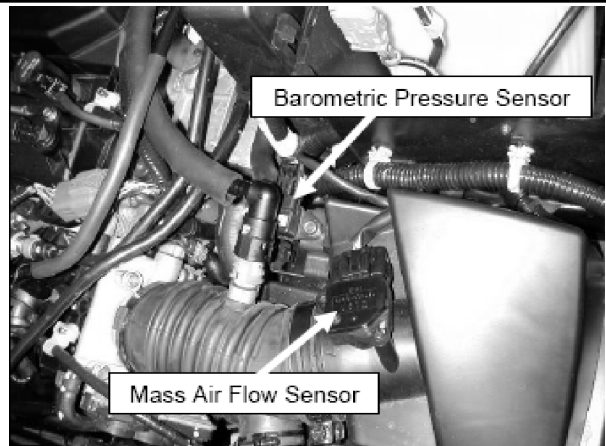
GETTING STARTED

1. Turn the ignition OFF and disconnect the vehicle's negative battery cable. If the engine has run within the past two hours, let it cool down.

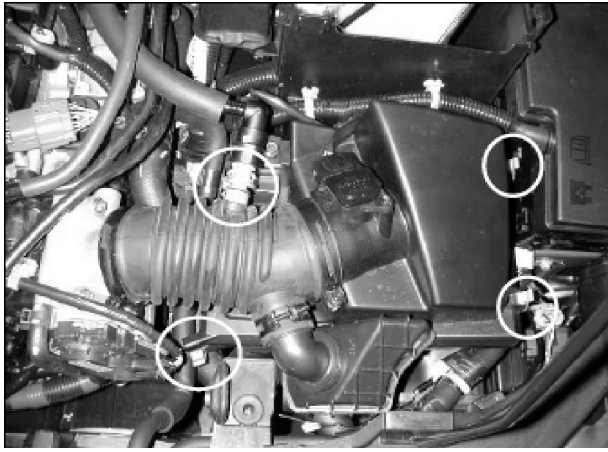
NOTE: Disconnecting the negative battery cable erases pre-programmed electronic memories. Write down all memory settings before disconnecting the negative battery cable. Some radios will require an anti-theft code to be entered after the battery is reconnected. The anti-theft code is typically supplied with your owner's manual. In the event your vehicle's anti-theft code cannot be recovered, contact an authorized dealership to obtain your vehicle's anti-theft code. We also highly recommend NOT discarding any stock parts after the installation.



2. Remove the plastic screw holding the battery cooling duct in place. Remove the battery box cover and the battery cooling duct.



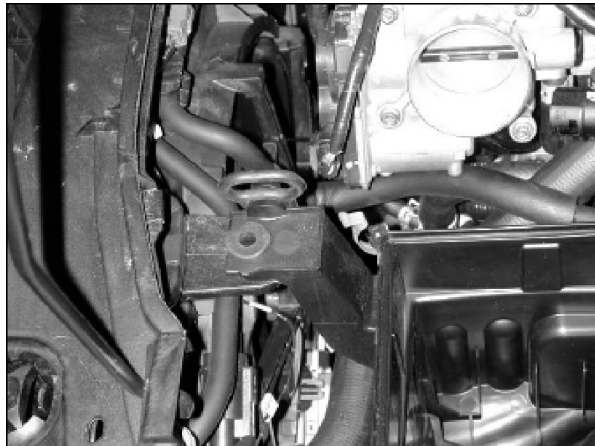
3. Unplug the mass air flow (MAF) sensor and the barometric pressure (BP) sensor (if equipped) from the wiring harness. Remove the plastic breather hose by pinching the blue connector and pulling on the hose.



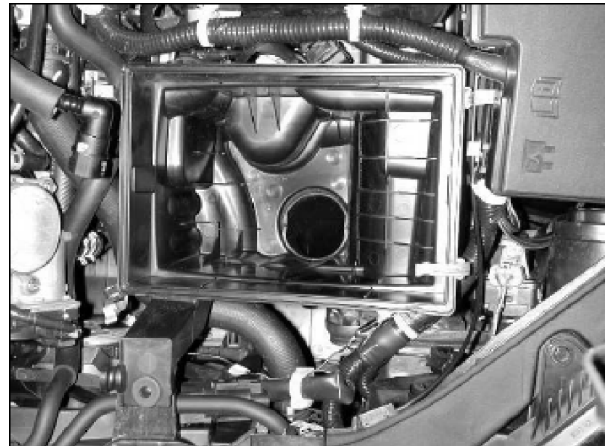
4. Un-snap the four metal retaining clips from the outer edge of the filter housing. Loosen the hose clamp securing the intake hose to the throttle body. Remove the entire filter housing top.



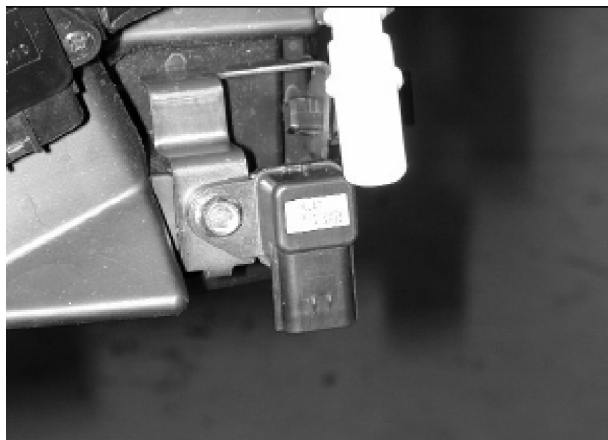
5. Carefully remove the blue plastic clip from the stock intake hose nipple. This can be done by gently prying the two tabs up and over the retaining ring with a small object such as a paperclip.



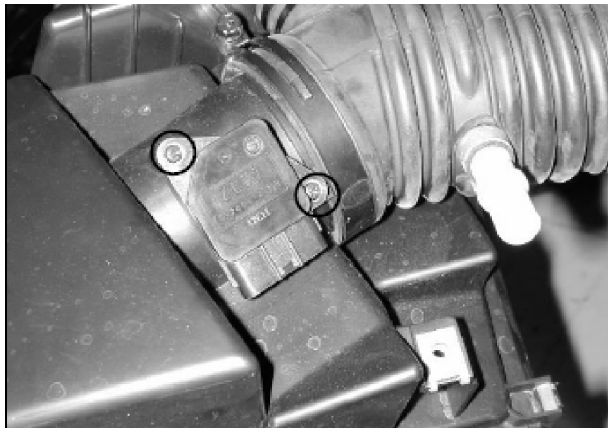
6. Remove the air filter from the lower air filter housing. Remove the rubber tie-down from the front of the housing mount by pulling up from the loop.



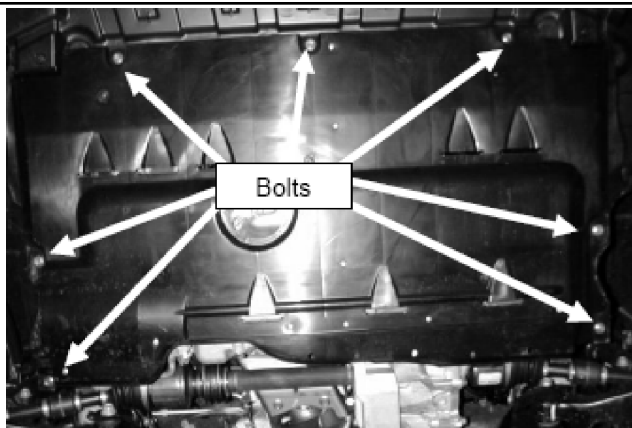
7. Lift up on the lower air filter housing to remove it.



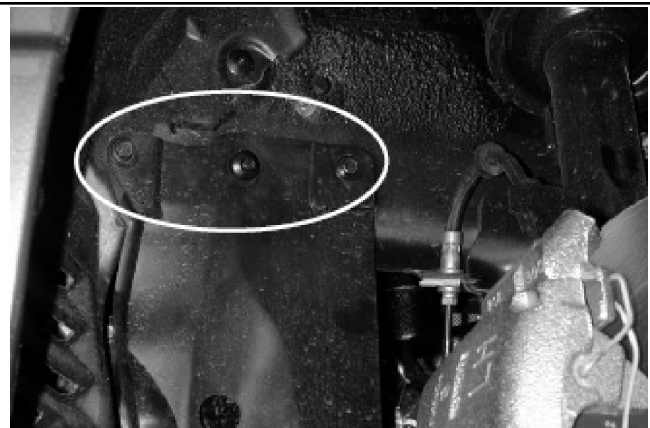
8. On models equipped with BP sensor; remove the bolt holding the BP sensor to the upper intake air box removed earlier. Set the BP sensor aside for later installation.



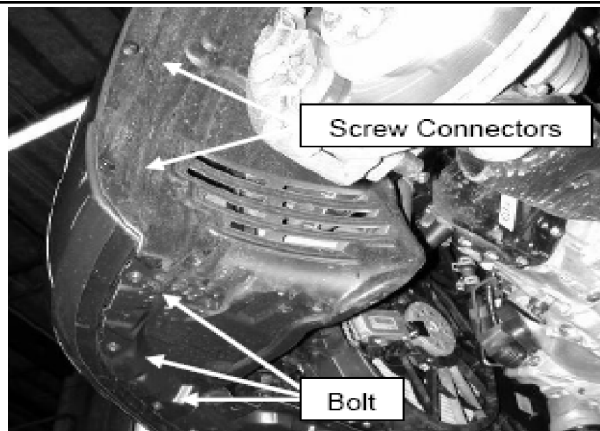
9. Disconnect and remove the MAF sensor from the filter-housing top by removing the two screws shown.



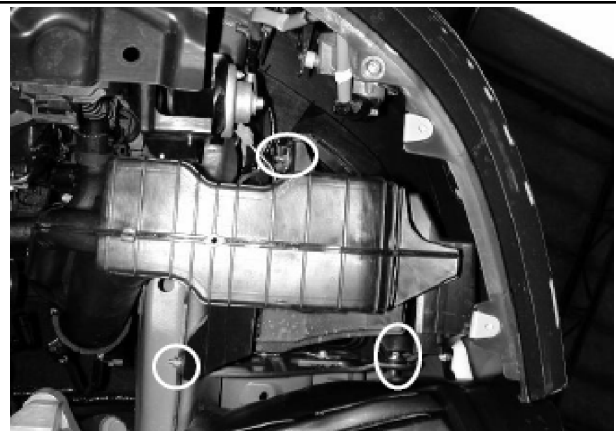
10. From underneath the car, remove the seven bolts holding the splash shield in place and remove shield



11. Refer to owner's manual to remove the driver side wheel. Remove the two bolts and the plastic screw connector holding the inner splash shield and remove the shield.



12. Remove the three bolts and the two plastic screw connectors holding the inner fender lining in place. Bend the lining so it allows access to the lower resonator box.



13. Remove the three bolts holding the lower resonator box behind the front bumper. Lower the Resonator box out of the vehicle.



14. Install the reducing coupler onto the throttle body using the supplied hose clamps.



15. On vehicles equipped with the crank case quick disconnect fitting, remove the plastic clip from the crank case vent on the stock intake tube as shown.
Note: Be careful not to damage as this piece will be reused in a later step.



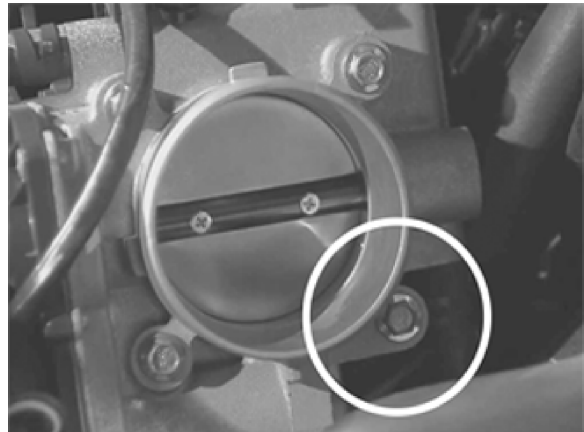
16. On vehicles equipped with the crankcase quick disconnect fitting, slide the hose clamp off of the rubber crank case vent flange.



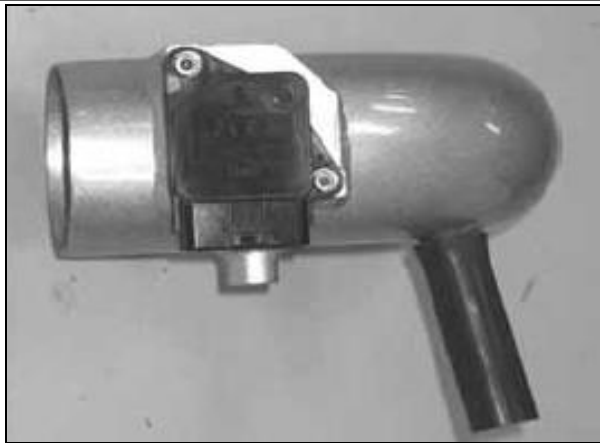
17. On vehicles equipped with the crankcase quick disconnect fitting, remove the plastic vent from the stock intake tube.



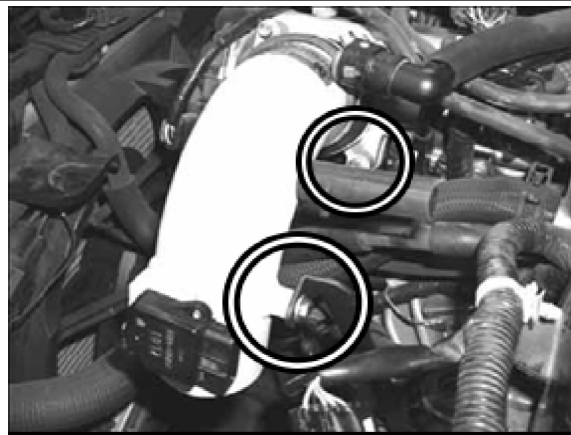
18. On vehicles equipped with the crankcase quick disconnect fitting, slide the plastic clip from step 16 back onto the crank case vent as shown.



19. Remove the bolt on the throttle body indicated in this image and install the intake bracket on.



20. On vehicles equipped with the crankcase quick disconnect fitting, install the provided rubber hose onto the vent on the intake tube. Install the mass air sensor into the intake tube using the provided 4mm Allen Head Bolts.



21. Install the intake tube into the silicone hose at the throttle body and align with the mounting bracket. Secure the tube with the provided hardware and hose clamp. ***Bracket may vary from image.**

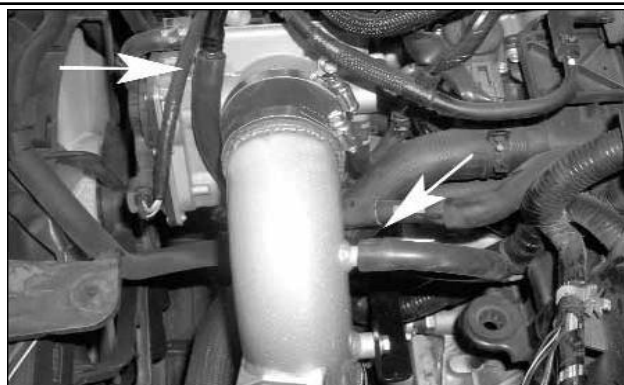


22. On vehicles equipped with the crankcase quick disconnect fitting, install the crankcase vent from step 18 into the silicone hose on the intake tube.



23.. On vehicles equipped with the crankcase quick disconnect fitting, reconnect the crankcase vent as shown.

NOTE: For best fit, trimming of the hose may be necessary.

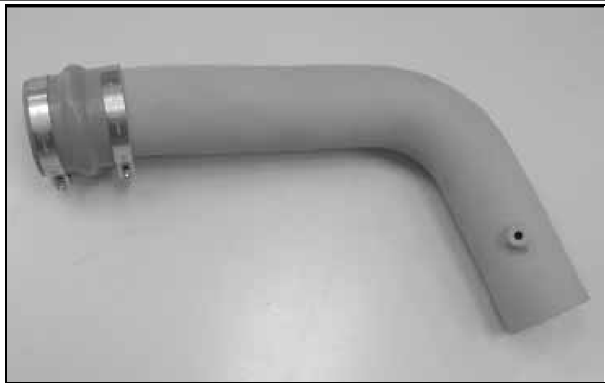


24. On vehicles **not** equipped with the crankcase quick disconnect fitting, install the provided silicone vent hose onto the factory plastic crank case vent tube, then route it under the intake tube and connect the open end onto the intake tube as shown.



25. Install the provided rubber mounted stud into the resonator threaded hole as shown.

NOTE: On the '06 Mazda 5 model, you will not need to use the rubber mounting stud. Skip to step 28.



26. Install the silicone hose and hose clamps onto the cold air tube as shown.



27. Install the mounting bracket onto the cold air tube using the provided hardware.



28. Underneath the vehicle, install the cold air tube.

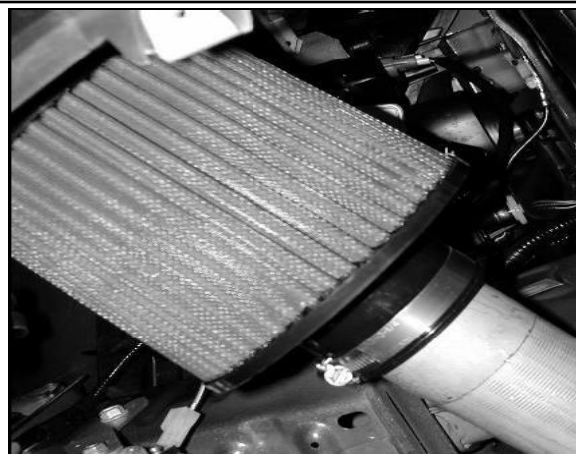


29. Slide the cold air tube onto the short ram tube.



30. Secure the bracket to the rubber mounted stud using the provided hardware.

NOTE: On the '06 Mazda 5 models, secure the bracket with the stock air box mounting stud removed earlier into the resonator threaded hole.



31. Install the air filter onto the cold air tube from underneath the vehicle.



32. Reconnect the mass air sensor.

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Final Steps

Once the intake has been positioned, tighten all of the clamps and secure all of the parts.

Upon completion of the installation, reconnect the negative battery terminal before you start the engine. Double check to make sure everything is tight and properly positioned before starting the vehicle.

Start the engine. Let the car idle for 3 minutes. Perform a final inspection before driving. Listen carefully for any odd noises, rattles and/or air leaks prior to taking it for a test drive. If any problems arise go back and check the vacuum lines, hoses and clamps that may be causing leaks or rattles and correct the problem.

Periodically, recheck the alignment of the intake system and make sure there is proper clearance around and along the length of the intake. Failure to follow proper maintenance procedures may cause damage to the intake and will void the warranty.