# 571202 - Mazdaspeed3 SS 3" Downpipe



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Mazda MPS 2007-2012

Mazdaspeed Axela 2007-2012

Mazdaspeed3 2007-2013



Congratulations on your purchase of the COBB Tuning Mazdaspeed3 Downpipe! The following instructions will assist you through the installation process. Please read them BEFORE beginning the install to familiarize yourself with the steps and tools needed. If you feel you cannot properly perform this installation, we HIGHLY recommend you take the vehicle to a qualified and experienced automotive technician.

IMPORTANT! Installing this kit will require custom tuning or utilizing an appropriate Stage Power Package map if you have a matching mechanical configuration. Please consult with COBB or an authorized ProTuner in your area if you have any questions!

### **Table of Contents**

- Table of Contents
- Tools Needed
  - Sockets
    - 3/8"
    - 1/2"
  - Hand Tools
  - Misc.
  - Wrenches
- Removal of Stock Downpipe
- COBB Downpipe Installation
- Links
- Contact Us:

# **Parts List**

- Downpipe
- O2 Sensor Bung (Pre-Installed)

### **Tools Needed**

### Sockets

3/8"

- 3/8" ratchet
- 3/8" 12" extension
- 3/8" 6" extension
- 3/8" Socket Swivel
- 3/8" 10mm socket
- 3/8" 12mm socket
- 3/8" 14mm socket
- 3/8" 14mm deep socket

#### 1/2"

- 1/2" ratchet
- 1/2" 14mm socket\*

### Hand Tools

- Phillips head screwdriver
- Flathead screwdriver
- Needlenose pliers

#### Misc.

Oxygen Sensor Wrench

#### Wrenches

- 8mm Ratcheting combination wrench
- 10mm combination wrench
- 14mm combination wrench

### **Removal of Stock Downpipe**

- 1. Start out by parking your car in a flat level area and making sure it's completely cooled off before starting. Sometimes things can go faster on older cars if you go through and spray penetrating oil on all the nuts and bolts the night before you start doing the job.
- 2. Now remove the two 10mm bolts that hold on the intercooler/engine cover. With the bolts removed lift the front corner of the cover up and slide it back to release it from the retaining bracket or the rear of the cover.



3. Next up we're going to start the removal of the top mount intercooler. To do so you'll want to undo the 3 12mm nuts holding it in place, make sure to remove the washers that are on top as well to avoid them falling into the depths of the engine bay.





4. Now remove the spring clamps holding the two hoses on to the BPV using your pliers.



 $\ensuremath{\mathsf{5.}}$  Finally undo the hose clamps from the turbo and throttle body couplers.





6. Lift the top mount free from the car and set it somewhere safe. Be careful as there are metal inserts in the rubber grommets for the intercooler mounting bolts, make sure they don't pop out and end up somewhere inconvenient.





7. Stuff something into the tubes to avoid dropping something into your turbo or engine.



8. Moving to the back of the engine spray some penetrating oil on the heat shield bolts and allow it to sit so you can get them out easily. After waiting a bit remove all 5 using your 8mm socket.





9. To avoid causing damage, it's a good idea to remove your O2 sensor at this time. Lift and support your car safely and undo the two plugs connecting the o2 sensor to the engine harness. Then work the harness out of the spiral holders and remove the o2 sensor with your oxygen sensor wrench or socket.





10. Now remove the 3 10mm bolts holding the heat shield in place for the downpipe section.





11. It can help get you a better visual and a little more space if you remove the heatshield for the manifold as well at this point. It's an easy 3 10mm bolts as well.



12. Using your 14mm socket and various length extensions and universal joints remove the 5 bolts holding the downpipe to the turbo. They are locking nuts so it will take a little bit of effort to back them out the entire way. Be patient! This is probably one of the most difficult spots to get to on the car.

13. Pop back under the car, using a 14mm remove the bolts where the rear flange goes to the catback. Undoing the 8 12mm bolts to remove the tunnel brace can help get you a little bit better access to the bolts.







14. Remove the front lateral brace using your 14mm socket on the 4 large bolts and a 12m on the single smaller bolt for the line cover.





15. With straight access, remove the rear downpipe section from the car by removing the 2 14mm spring bolts and pulling it out of the rubber hangers..





- 16. Unplug your rear o2 sensor connector.
- 17. Unbolt the two 14mm bolts from the support bracket for the downpipe.



18. Carefully twist and turn the upper downpipe section out of the car being careful not to hit the oxygen sensor on anything.



19. Using your oxygen sensor socket remove the rear o2 sensor and set it in a safe place, making sure to remember which o2 sensor goes where.



# **COBB** Downpipe Installation

If your car is older it may be a good time to replace your oxygen sensors with new factory units. Over time they may read innaccurately and a good air fuel reading is critical to engine health.

1. Transfer the rear most downpipe donut gasket over to the new COBB downpipe by carefully prying it outward a little at a time with a flat screwdriver or purchase a new one from the dealership.



2. sing the provided bolts and pins, install the exhaust hanger parts facing outward.



3. Make sure your turbo to downpipe flange asket is still in place and snake the new COBB Downpipe in place, using the rubber hangers to hold it up.



- 4. Using your favorite extensions again to rebolt the 5 14mm nuts in place, adding anti-seize to the threads first can help make them easier to service next time and prevent snapping or stripping the studs.
- 5. Add anti-seize to the threads of the up-stream oxygen sensor and then add it in to the higher-up bung on the downpipe. Route the wiring down towards the connector away from as many heat sources as you can.



- 6. re-install the manifold heat shield and upper large heatshield using anti-seize on the bolts to prevent seizing.
- 7. Moving back under the car, apply anti-seize to the rear o2 sensor and install.



- 8. Plug in both oxygen sensors to the appropriate locations.
- Bolt the COBB Downpipe to the catback using the stock spring bolts from the same location. The bolt should have a shoulder which will bottom out against the downpipe so make sure it doesn't get caught on the catback flange when you're installing it in place.



- 10. Reinstall the under car braces, intercooler and engine cover.
- 11. Flash the appropriate map for the modifications you have on the vehicle
- 12. Go out and enjoy!

## Links

#### Mazda Installation Instructions

Main Installation Instruction Repository for Mazda Parts

#### Map Notes for Mazdaspeed3

Link to Mazda Map Notes to see what map you should be on given the parts you've added

### **Contact Us:**

### **COBB** Customer Support

Web Support and Tech Articles: COBB Tuning Customer Support Center

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