

# 2012 BMW F22 228i / F32 428i / F30 320i / 328i

## PERFORMANCE AIR INTAKE

### PARTS LIST AND INSTALLATION GUIDE



#### PARTS INCLUDED

- 1PC** | WRINKLE BLACK ALUMINUM INTAKE PIPE W/ CNC-MACHINED MAF
- 1PC** | AIRBOX W/ PROTECTIVE EDGING
- 1PC** | HIGH-FLOW OILED FILTER
- 1PC** | RUBBER MOUNTING ISOLATOR
- 1PC** | RUBBER CAP FOR VACUUM PORT
- 1PC** | ZIP TIE
- 1PC** | CARB EO STICKER
- MOUNTING HARDWARE

#### TOOLS NEEDED

- |                 |                                 |
|-----------------|---------------------------------|
| 2.5MM ALLEN KEY | FLATHEAD SCREWDRIVER            |
| 4MM ALLEN KEY   | T20 TORX BIT/SOCKET             |
| 10MM WRENCH     | DIAGONAL CUTTING PLIERS (DIKES) |

#### INSTALL TIME **1 HOUR**

#### INSTALL DIFFICULTY

#### DISCLAIMER

- **Raise vehicle only on jack stands or on a vehicle lift.**
- **Allow vehicle to cool completely prior to attempting installation.**
- **Do not run the engine or drive the vehicle while overheating; serious damage can occur.**
- **Please dispose of any liquids properly.**
- **Mishimoto is not responsible for any vehicle damage or personal injury due to installation errors, misuse, or removal of Mishimoto products.**
- **Mishimoto suggests that a trained professional install all Mishimoto products.**

#### CAUTION

Never work on the cooling system when it is hot. The coolant temperature in the radiator can be considerably higher than boiling, and the system may be under pressure. Opening a cooling system that is hot or under pressure can result in serious injury. Always wait until the system has cooled completely before servicing it in any way.

#### INSTALL PROCEDURE

- 01.** Disconnect the wiring harness for the mass airflow (MAF) sensor, located on the front of the engine, just below the engine cover. To release the connector, depress the locking tab and slide the connector apart.
- 02.** Remove the hood-release cable from the side of the stock airbox. This cable is secured in three places.
- 03.** Loosen the worm-gear clamp connecting the intake pipe to the airbox.
- 04.** For N26 engines only: Remove the vacuum line connected to the airbox.
- 05.** Remove the airbox from the vehicle. The airbox is held by three grommets. Simply lift the airbox upward at these grommets to release it from the vehicle.
- 06.** Detach the clip that secures the intake air tube to the coolant hose.
- 07.** Loosen the worm-gear clamp connecting the intake hose to the rest of the intake system. Use a fresh rag to clean any dirt or buildup from the mouth of the intake pipe.
- 08.** Remove the two rubber mounting grommets from the airbox. The first one is right on top of the radiator, and the second is located on the driver side near the expansion tank.
- 09.** Remove the MAF sensor from the stock airbox. (2x T20 Torx screws)
- 10.** Insert the MAF sensor into the Mishimoto intake pipe, and secure it with the provided Allen screws. (2x 2.5mm Allen screws)
- 11.** Install the Mishimoto intake pipe. Orient the pipe so that the MAF sensor is up top, with the connector facing the engine.
- 12.** Slip the lower section of the airbox over the intake pipe.

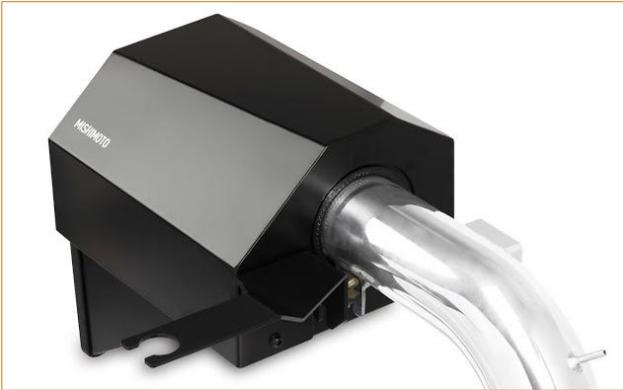
CONTINUED ON FOLLOWING PAGE

# 01

# 2012 BMW F22 228i / F32 428i / F30 320i / 328i PERFORMANCE AIR INTAKE INSTALLATION GUIDE



13. Install the air filter onto the end of the intake pipe, and secure it with a worm-gear clamp.
14. Attach the bracket to the upper half of the intake airbox using the provided hardware. (2x 4mm Allen-head screws)



15. Take one of the airbox mounting grommets that you removed earlier, and install it on the bracket. Install the other grommet to the original passenger-side location.
16. Attach the lid of the airbox cover to the bottom half of the airbox. Be sure that the peg on the airbox slips into the open grommet on the passenger side, while the grommet on the airbox slips over the peg in the center of the radiator support.

17. Secure the upper airbox to the lower section of the airbox using the supplied hardware. (3x 4mm Allen-head screws)
18. Tighten the worm-gear clamp that connects the Mishimoto intake pipe to the rest of the intake system.
19. Prepare the isolator bushing by partially threading the provided locking nuts onto the isolator bushing. (2x locking nuts)
20. Install the isolator bushing between the fork on the airbox and the fork on the intake pipe. (2x 10mm nuts)
21. Connect the wiring harness to the MAF sensor.
22. If you have an N26 engine, install the vacuum line to the port on the intake pipe. If you have an N20 engine, install the provided rubber port cover, and secure it with the zip tie. Cut off the excess length of zip tie.
23. Please place the included CARB EO sticker in a clean, visible location.

**Congrats! You just finished installing the  
2012 BMW F22 228i / F32 428i / F30 320i / 328i  
Performance Air Intake.**



# 02