

#### PARTS INCLUDED

- **1PC |** STEEL SHROUD W/ BLACK POWDERCOAT
- **1PC |**16" MISHIMOTO SLIM ELECTRIC FAN

#### **TOOLS NEEDED**

POP-CLIP PLIERS	1/4" DRIVE RATCHET
DIAGONAL PLIERS	T25 TORX SOCKET OR DRIVER
10MM SOCKET	FLATHEAD SCREWDRIVER

# INSTALL TIME 1.5 HOURS 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.

### NOTE

This fan and fan shroud require the installation of a fan controller. It cannot be used in conjunction with the stock fan controller.

## **INSTALL PROCEDURE**

- **01.** Record any radio presets and security codes, as these will be lost when the battery is disconnected.
- **02.** Disconnect the negative terminal from the battery to prevent the fans and other electronic components from operating. Open the trunk and remove the battery cover located on the passenger side. The cover is held in by two quarter-turn flathead fasteners. Loosen the negative (black) battery terminal, remove the cable, and set it off to the side so that it will not contact the battery post. (2x quarter-turn flathead fasteners, 1x 10mm nut)
- 03. Install a Mishimoto fan controller. (Separate guide)
- 04. Remove the air intake duct by removing the three expansion rivets that secure it. (3x expansion rivets)
- **05.** Remove the expansion rivet that secures the fan shroud to the radiator on the driver side of the fan shroud, near the expansion tank. (1x expansion rivet)



- 06. Disconnect both electrical connectors from the fan shroud.
- 07. Remove the screw that secures the fan shroud to the radiator on the passenger side. (1x T25 Torx screw)



**08.** Remove the fan shroud from the vehicle by lifting it up and out of the engine bay.

CONTINUED ON FOLLOWING PAGE



# '99-'06 BMW E46 NON-M VEHICLES PERFORMANCE FAN SHROUD KIT INSTALLATION GUIDE



- **09.** Install the Mishimoto fan shroud. One tab on the lower driver side of the fan shroud seats inside the radiator; the other tab seats into the expansion tank bracket.
- Secure the upper passenger side of the fan shroud using the original hardware. (1x T25 Torx screw)
- **11.** Secure the upper driver side of the fan shroud using the original expansion rivet. (1x expansion rivet)
- Reinstall the negative battery cable onto the battery post. Tighten the cable nut and install the battery cover. (2x quarter-turn flathead fasteners, 1x 10mm nut)

 Start the vehicle and allow it to warm up to operating temperature. Check fan operation to ensure proper wiring and installation of the fan control module.

## Congrats! You just finished installing the '99-'06 BMW E46 Non-M Vehicles Performance Fan Shroud Kit.





Learn more about performance engine cooling we have.