2001-2006 BMW E46 M3 PERFORMANCE ALUMINUM RADIATOR

PARTS LIST AND INSTALLATION GOIDE

PARTS LIST

1PC | MISHIMOTO PERFORMANCE RADIATOR

1PC | FAN TOOL

1PC | BLACK 1/8" NPT PLUG

5PC | M6 X 1.0 X 16MM FLANGE HEX BOLTS

TOOLS NEEDED

FLATHEAD SCREWDRIVER

NEEDLENOSE PLIERS

3/8 DRIVE RATCHET

T25 TORX SOCKET

FAN REMOVAL TOOL (SUPPLIED)

4MM HEX BIT SOCKET

FUNNEL

10MM SOCKET

BMW APPROVED COOLANT

1/4" DRIVE RATCHET

DIFFICULTY LEVEL 3/5

1/4" DRIVE 6 INCH EXTENSION

INSTALL TIME 2 HOURS

DISCLAIMER

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

INSTALLATION INSTRUCTIONS

01 | REMOVING THE AIR INTAKE DUCT

- ${\bf 1.}\ {\sf Raise}$ the vehicle on a lift, or support it on jack stands.
- 2. Remove the air intake duct (3x pop clips, pliers).
- 3. Remove the air filter (1x clamp, flathead screwdriver).
- 4. Unbolt the airbox (2x 10mm bolts).

5. Remove the housing for the mass airflow sensor (1x clamp, flathead screwdriver).



02 | REMOVING THE STOCK RADIATOR

- 1. Once the vehicle is cooled down, remove the cap from the radiator reservoir.
- **2.** Remove the quick-disconnect clip from the upper hose (flathead screwdriver).
- 3. Disconnect the coupler for the upper hose.
- **4.** Remove the side plastic trim on the fan shroud (1x pop clip).
- **5.** Remove the small overflow port from the quick-disconnect coupler, and then remove the plastic trim (flathead screwdriver).
- 6. Remove the plastic trim on the other side of the radiator (1x pop clip).



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INSTALLATION GUIDE

7. Remove the electrical relay.



- 8. Disconnect the plug on the stock fan shroud.
- 9. Remove the retaining screws from the oil cooler (2x t25 torx).
- 10. Remove the oil cooler and secure it out of the way.
- 11. Remove the screws from the bottom of the fan shroud (2x t25 torx).
- 12. Remove the screws from the top of the fan shroud (2x t25 torx).
- **13.** Remove the upper hose completely [1x clamp, flathead screwdriver].
- **14.** Remove the stock mechanical fan. Turn clockwise (32mm wrench, supplied Mishimoto fan-removal tool).



15. Remove the fan and fan shroud assembly.

16. Remove the sensor from the lower radiator hose.



- 17. Remove the lower radiator hose at the quick-disconnect coupler.
- 18. Remove the support screw for the upper radiator (1x t25 Torx).
- 19. Remove the radiator from the car.

03 | INSTALLING THE MISHIMOTO RADIATOR

- 1. Reinstall the mounting screw at the top of the radiator (1x t25 Torx).
- 2. Reconnect the quick-disconnect coupler to the lower radiator.
- **3.** Reconnect the coolant temperature sensor to the lower hose.
- 4. Reinstall the fan shroud.
- **5.** Reinstall the mounting screw at the top of the fan shroud on the passenger side (1x t25 Torx).
- **6.** Install the supplied bolts at the bottom of the fan shroud (2x 10mm).
- **7.** Reinstall the upper radiator hose to the engine (1x clamp, flathead screwdriver).
- **8.** Reconnect the quick-disconnect coupler on the upper hose to the radiator.
- 9. Reconnect the overflow port.
- 10. Reinstall the air intake.
- 11. Reconnect the mass airflow housing (1x clamp, flathead screwdriver).
- 12. Reinstall the bolts for the air intake box (2x 10mm).
- 13. Reconnect the mass airflow sensor.
- **14.** Reinstall the air filter (1x clamp, flathead screwdriver).
- **15.** Open the air bleeder located on the upper radiator hose.
- **16.** Fill the system with a $50/50 \, \text{mix}$ of BMW-approved coolant and distilled water.
- 17. Start the car, set the heat to high, bleed the coolant system, and check for any leaks.
- **18.** You have now successfully installed the Mishimoto BMW E46 M3 Performance Aluminum Radiator. Enjoy!

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