

# 1992—1999 BMW E36 ALUMINUM COOLANT EXPANSION TANK PARTS LIST AND INSTALLATION GUIDE



## PARTS INCLUDED

1PC | ALUMINUM EXPANSION TANK

1PC | CNC-MACHINED DIPSTICK

1PC | MISHIMOTO RADIATOR CAP

1PC | OVERFLOW HOSE

1PC | WORM-GEAR CLAMP

MOUNTING HARDWARE

## TOOLS NEEDED

10MM RATCHET WRENCH

19MM RATCHET WRENCH (IF USING A MISHIMOTO RADIATOR)

SMALL FLATHEAD SCREWDRIVER

LARGE FLATHEAD SCREWDRIVER

ADJUSTABLE WRENCH

FUNNEL

MISHIMOTO LIQUID CHILL®

INSTALL TIME **1 HOUR**

INSTALL DIFFICULTY

## DISCLAIMER

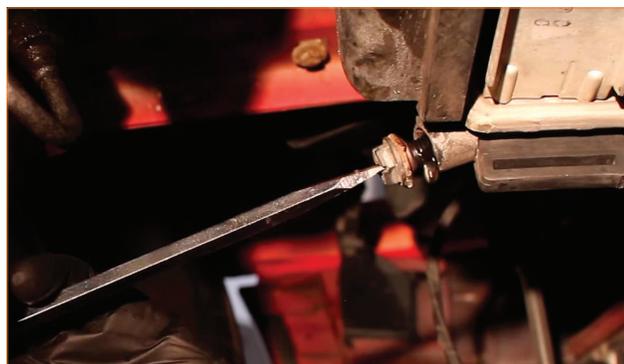
- Raise vehicle only on jack stands or on a vehicle lift.
- Allow vehicle to cool completely prior to attempting installation.
- Do not run the engine or drive the vehicle while overheating; serious damage can occur.
- Please dispose of any liquids properly.
- Mishimoto is not responsible for any vehicle 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. Place a drain pan under the radiator drain, and loosen the drain plug on the radiator to drain the coolant from the vehicle. Remove the cap on the expansion tank to speed up the draining process. Close the drain once coolant has drained from the expansion tank.



02. Remove the coolant bleeder screw from the top of the stock expansion tank.



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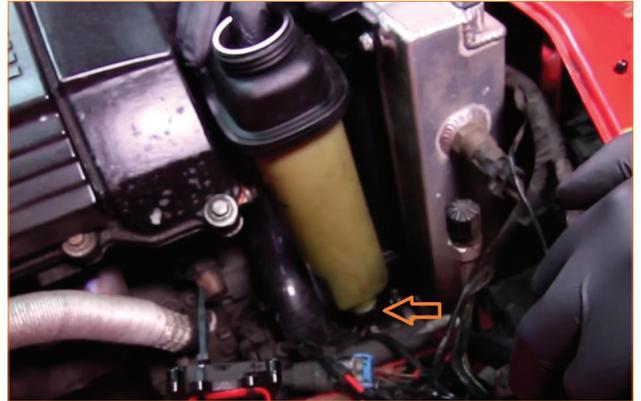
03. Remove the bleeder screw seal. Gently pry up on the tabs and wiggle the seal until it is loose, then pull it out with your fingers. This seal is fragile, so take your time and be careful.



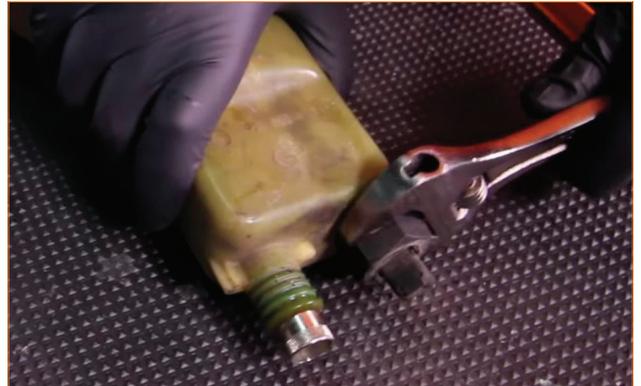
04. Loosen the worm-gear clamp connecting the expansion tank and the overflow hose. To locate the clamp, tilt the expansion tank toward the motor, and look through the hole from which the bleeder screw seal was removed. Pull the overflow hose off the expansion tank. (1x worm-gear clamp)



05. Disconnect the electrical harness from the coolant level sensor, located on the bottom of the expansion tank.



06. Loosen the worm-gear clamp that secures the coolant hose to the base of the expansion tank, and then separate the lower coolant hose from the tank. **Tip:** Tilt the expansion tank toward the passenger-side fender for better access. (1x worm-gear clamp)
07. Remove the stock expansion tank from the vehicle.
08. Note the orientation of the electrical contacts on the coolant level sensor. Remove the sensor from the stock expansion tank by unscrewing the plastic nut and sliding the sensor out.



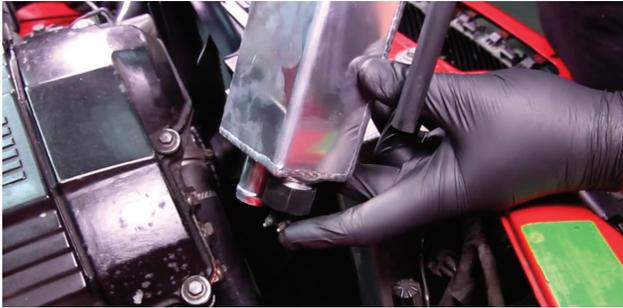
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09. Install the coolant level sensor into the Mishimoto expansion tank. Do not overtighten the nut, or the plastic threads may be damaged. The electrical contacts on the sensor should be in the same orientation as when they were removed.



10. Install a worm-gear clamp over the lower coolant hose, and then slip the lower port on the Mishimoto expansion tank into the lower coolant hose. Tighten the worm-gear clamp to secure the hose. (1x worm-gear clamp)
11. Remove the pop-clip that secures the upper part of the fan shroud on the passenger side. (1x pop-clip)



12. Slip the forward mounting peg on the top of the Mishimoto expansion tank into the hole where the bleeder screw seal was removed.



13. Attach the overflow hose to the port on the expansion tank, and then secure the hose with the worm-gear clamp. (1x worm-gear clamp)



14. Reinstall the pop-clip that secures the top of the fan shroud. (1x pop-clip)
15. Connect the electrical harness for the coolant level sensor.
16. Fill the cooling system with premixed, BMW-approved coolant through the reservoir pressure cap, start the engine, and allow it to idle with the cap off. Turn the heater control valve on the vehicle's HVAC unit to full hot, and put the fan on low. Monitor the engine temperature and coolant level in the reservoir. Add coolant as needed to maintain proper level in the reservoir, and check your connections for leaks. If the vehicle begins to overheat or coolant starts to overflow from the reservoir, shut off the engine and allow it to cool before continuing. Once the vehicle is fully warmed up and the coolant level has stabilized, allow the vehicle to cool off completely, and then top off the coolant level. Coolant level should be checked once more after putting in some miles.

**Congrats! You just finished installing the 1992—1999 BMW E36 Aluminum Coolant Expansion Tank.**