1986-1992 Toyota Supra - Coolant Thermostat

1986-1992 Toyota Supra | Advanced | 1-2 hours | $35 DIY

TOOLS

Large drain pan Socket set for the two outlet bolts Plastic gasket scraper Screwdriver or pliers for the hose clamp Funnel Gloves and safety glasses

PARTS

Thermostat with gasket (correct temperature rating for 7M-GE) $16.00
Fresh Toyota-compatible coolant $19.00

STEPS

1. **Work stone-cold and depressurize - Work on a cold engine: the pressurized 7M system** sprays scalding coolant if opened hot. Let it sit hours if driven, then crack the radiator cap. Gather a drain pan, fresh coolant, a new thermostat, and a paper gasket first.
2. **Drain the coolant below the thermostat - Place a drain pan under the radiator drain cock** and turn it counterclockwise until the level drops below the housing - no need to drain the whole system. Close the cock snugly. Coolant is lethal to pets; wipe every spill.
3. **Find the thermostat at the water outlet - Follow the upper radiator hose to the front of** the cylinder head - the clamp-on gooseneck there is the water outlet holding the thermostat on 7M-GE/7M-GTE engines, secured by just two bolts. Note how the hose and small fittings route.
4. **Remove the outlet and the old thermostat - Loosen the hose clamp, twist the upper hose** off its neck, and remove the two bolts evenly to lift the housing. The thermostat and gasket come out with it - wax-pellet element points into the engine.
5. **Test the old unit and clean the surfaces - Verify the old thermostat in heated water: it** should start opening at 86-90C (187-194F) and lift at least 8mm at a full boil. Scrape every trace of old gasket off both surfaces - leftover material guarantees a leak.
6. **Install the new thermostat with the jiggle valve up - Fit the new paper gasket onto the** new thermostat, then set the thermostat into the housing with its jiggle valve - the tiny bleed pin - facing straight up, exactly as the factory repair manual illustrates. This orientation lets trapped...
7. **Refill, bleed the air, and leak-check - Reconnect the upper hose and tighten its clamp,** then fill the radiator slowly with the correct coolant. Start the engine with the heater set to full hot and the radiator cap off, and let it idle up to operating temperature - you'll see t...

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