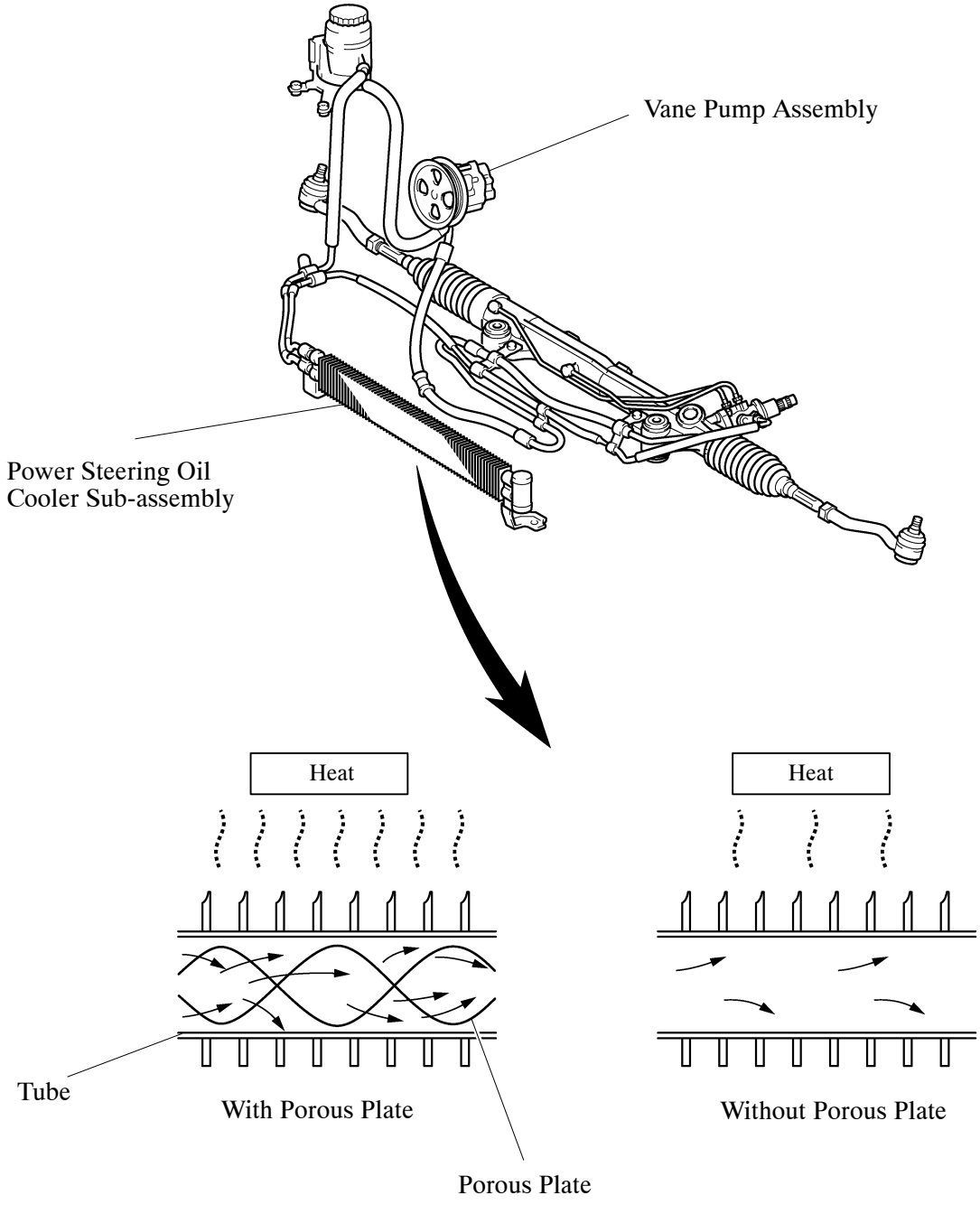
■POWER STEERING PIPING

1. General

- The power steering piping has been optimized to reduce hydraulic pulsation and thus improve quietness.
- The power steering piping has an oil cooler provided with cooling fins.
- The oil cooler on 1GR-FE engine models for G.C.C. countries has a porous plate arranged in a spiral pattern in the tube. This plate diffuses fluid flow in the tube and helps improve fluid heat dissipation to ensure the cooling performance of the oil cooler.
- The installation position of the relief valve mechanism on 1GR-FE engine and 1VD-FTV engine models for G.C.C. countries has been changed from inside the power steering pump to between the power steering system piping.



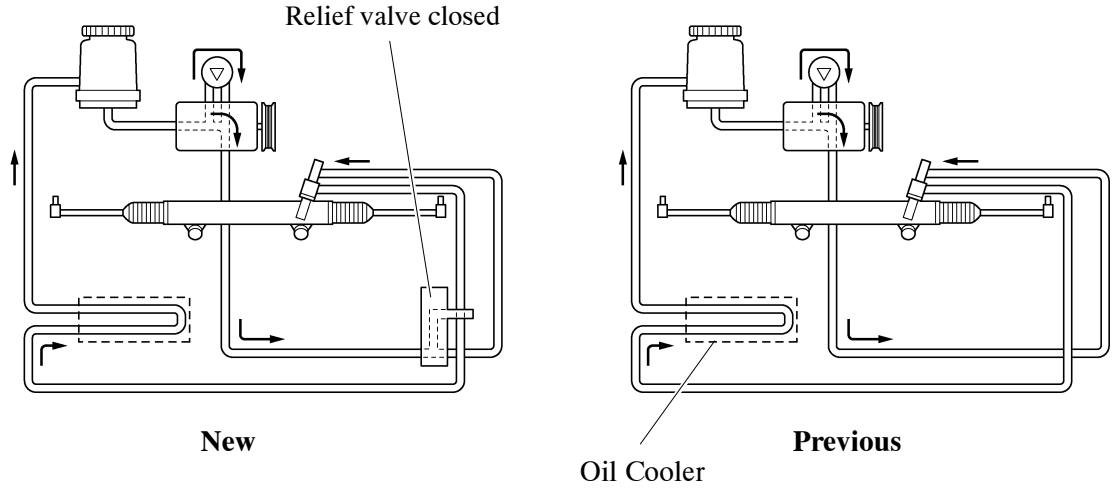
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2. Relief Valve Mounted Outside Pump (For G.C.C. Countries Models)

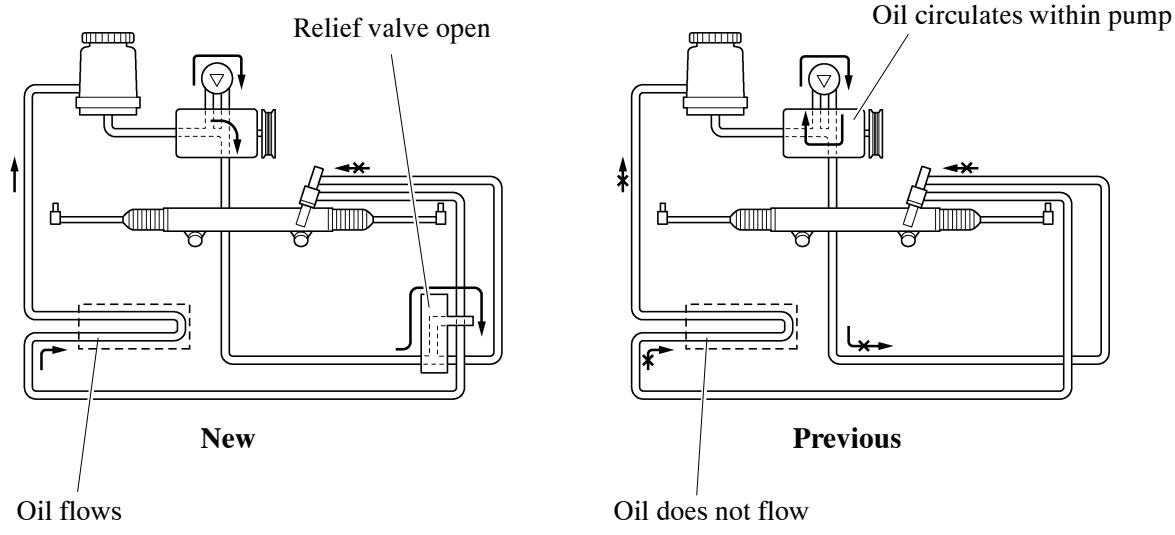
- When the steering wheel is not being turned, the relief valve is closed so oil flows through the pipes in the same manner as on a conventional model.
- If the relief valve is open while the steering wheel is being turned fully, the oil temperature tends to increase on the conventional model because the oil only circulates within the pump. On the other hand, the oil circulates through the piping system on the new model, which reduces the oil temperature increase.

▶ When relief valve is not activated (steering wheel is not being turned) ◀

- The controlled amount of oil flows.



▶ When relief valve is activated (steering wheel is turned fully) ◀



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