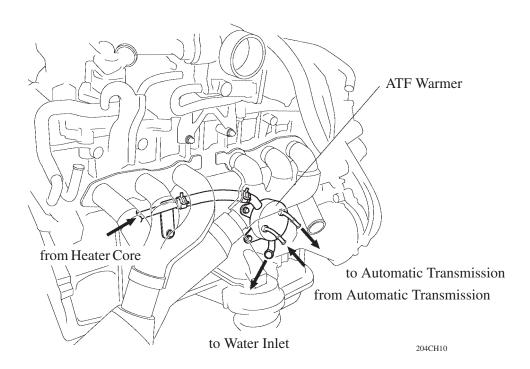
■ ATF WARMER

1. General

An ATF warmer has been adopted for the purpose of warming up the ATF quickly and to set the ATF temperature higher.

As a result, fuel economy has been improved.

▶ Layout of Components **◄**



2. Operation

| Item | ATF Warmer | Conventional Type |
|----------------|--|---|
| During warm-up | The engine coolant flows directly from the engine to the ATF warmer in order to warm up the ATF quickly even before the thermostat of the engine opens. Consequently, the friction loss of the automatic transmission is quickly reduced, thus improved fuel economy. | Because the ATF oil cooler is provided in the radiator, the ATF is warmed up only by the actuation of the automatic transmission oil pump until the thermostat of the engine opens. |
| After warm-up | The engine coolant flows into the ATF warmer to cool down the ATF before cooling the radiator, thus enables to set up the ATF temperature higher than usual. With this, the friction loss of automatic transmission will be reduced to improve fuel economy. | After being cooled in the radiator, the engine coolant flows around the ATF oil cooler to cool the ATF. |