

Diagnostics

The ATC ECU performs a diagnostic check each time the ignition is switched on. To avoid nuisance fault indications at low light levels, the sunlight sensor is omitted from the diagnostic check. If a fault is detected, the audible warning sounds three times and the AUTO window on the control panel display flashes for 20 seconds. The ATC ECU then reverts to normal control but uses a default value or strategy for the detected fault. Faults are identified by performing a manual diagnostic check of the system.

A manual diagnostic check includes a check of the sunlight sensor, and is initiated by pressing and holding the AUTO switch and the air distribution switch, then turning the ignition switch from off to on. The audible warning sounds once and the indications on the control panel display illuminate. FC is shown in the LH temperature window and the results of the check are shown as a two digit fault code in the RH temperature window. If a fault is detected, the audible warning sounds three times and the AUTO window on the display flashes on and off for 20 seconds. If more than one fault is detected, the fault codes cycle in numerical order, at 1 Hz. The audible warning sounds as each fault code is shown. In low light conditions, to avoid false sunlight sensor fault indications, the sunlight sensor should be illuminated with a strong light source.

Diagnostic fault codes and fault descriptions

| Code | Component | Fault | Default value/strategy |
|------|-----------------------------------|---|---|
| 00 | - | No fault found | - |
| 11 | In-car temperature sensor | Open or short circuit | 25°C (77°F) |
| 12 | Ambient temperature sensor | Open or short circuit | 10°C (50°F) Cooling fan permanently on Display shows "- -" if external air temperature selected |
| 13 | Thermistor | Open or short circuit | 0°C (32°F) |
| 14 | Heater coolant temperature sensor | Open or short circuit | 70°C (158°F) |
| 21 | Sunlight sensor, left output | Open or short circuit | No solar heating correction |
| 22 | Sunlight sensor, right output | Open or short circuit | No solar heating correction |
| 31 | LH temperature servo motor | Open or short circuit Motor or flap mechanism seized | Servo motor locked in position |
| 32 | RH temperature servo motor | Open or short circuit Motor or flap mechanism seized | Servo motor locked in position |
| 33 | Distribution servo motor | Open or short circuit Motor or flap mechanism seized | Servo motor locked in position |