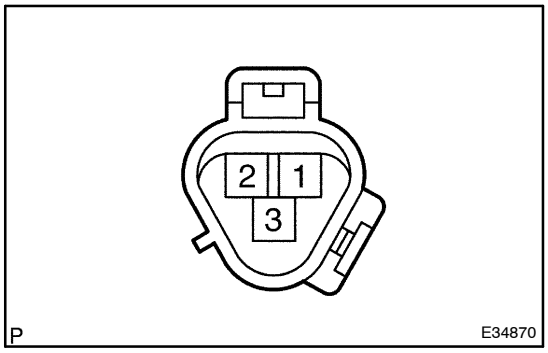
INSPECTION



1. COOLER COMPRESSOR ASSY (1GR–FE/1KD–FTV ENGINE TYPE)

(a) Connect the positive (+) lead from the battery to terminal 3 and the negative (–) lead to the body ground.

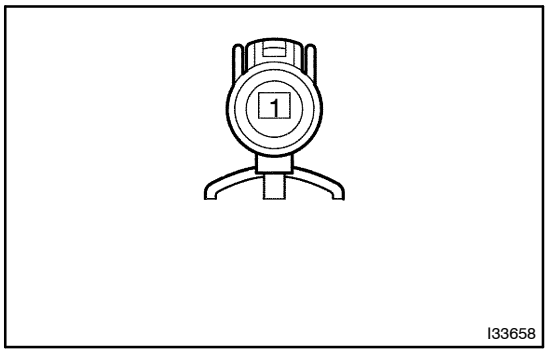
(b) Check that the magnetic clutch energized.

If operation is not as specified, replace the magnet clutch assy.

(c) Measure resistance between terminal 1 and 2.

Standard resistance: 165 – 205 Ω at 20 °C (68 °F)

If resistance is not as specified, replace the cooler compressor assy.

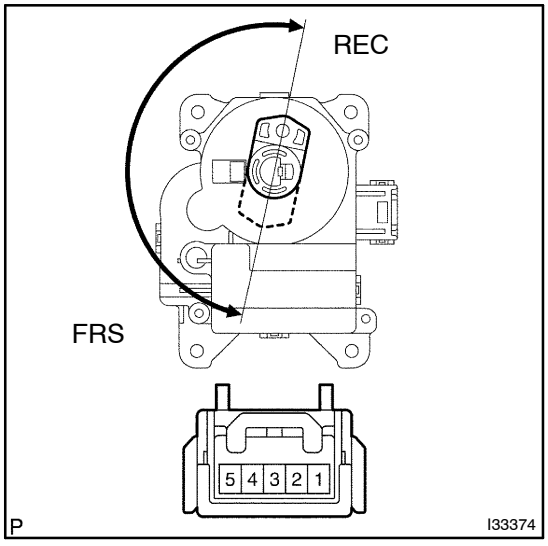


2. COOLER COMPRESSOR ASSY (1KZ–TE/3RZ–FE/5L–E ENGINE TYPE)

(a) Connect the positive (+) lead from the battery to terminal 1 and the negative (–) lead to the body ground.

(b) Check that the magnetic clutch energized.

If operation is not as specified, replace the magnet clutch assy.



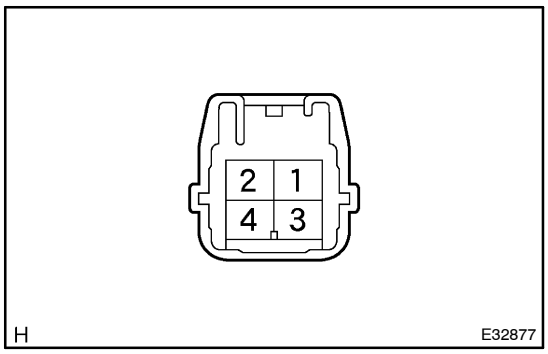
3. BLOWER DAMPER SERVO SUB–ASSY (MANUAL AIR CONDITIONING)

(a) Inspect servomotor operation.

(1) Connect the positive (+) lead from the battery to terminal 5 and negative (–) lead to terminal 1, then check that the arm turns to "FRS" side smoothly.

(2) Connect the positive (+) lead from the battery to terminal 5 and negative (–) lead to terminal 2, then check that the arm turns to "REC" side smoothly.

If operations are not as specified, replace the mode damper servomotor.

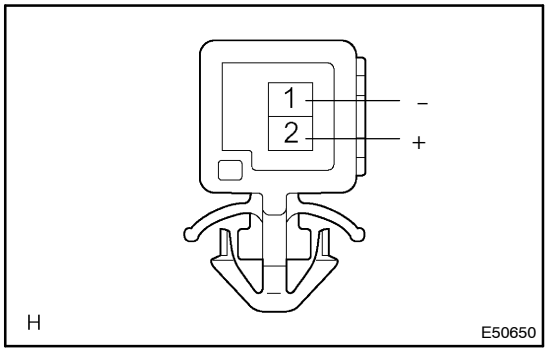


4. BLOWER RESISTOR (MANUAL AIR CONDITIONING)

(a) Measure resistance between terminals, as shown in the chart.

Tester connection	Specified condition
1 – 2	0.642 – 0.738 Ω
1 – 3	0.205 – 0.235 Ω
1 – 4	1.572 – 1.808 Ω

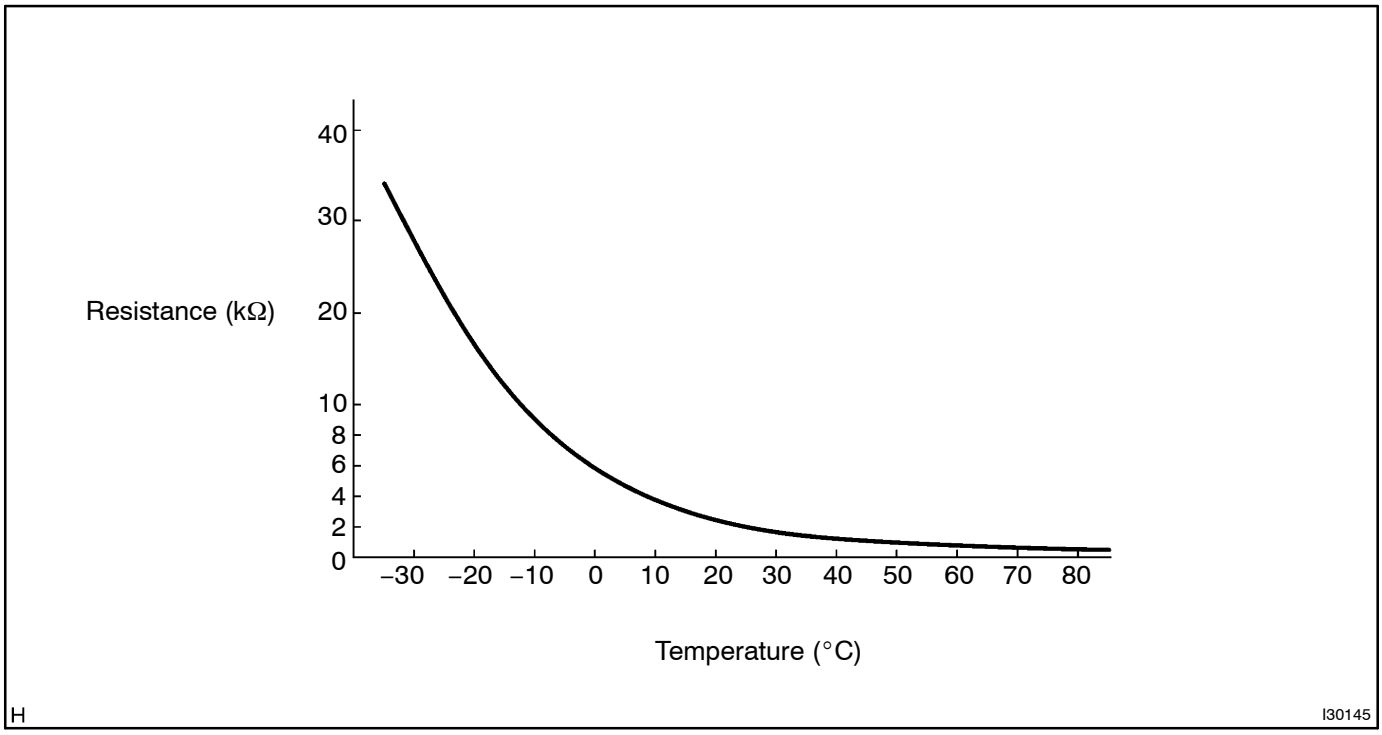
If resistance is not as specified, replace the blower resistor.



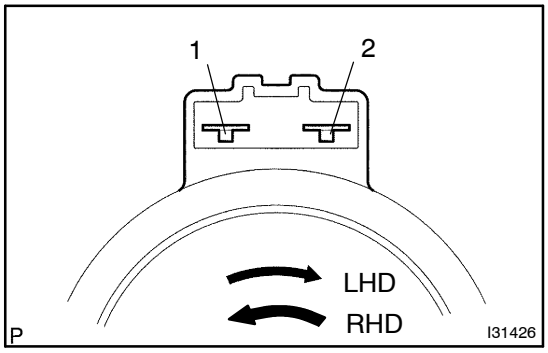
5. COOLER THERMISTOR NO.1 (MANUAL AIR CONDITIONING)

(a) Check resistance between terminal 1 and 2 of cooler thermistor No. 1 at each temperature, as shown in the chart.

Resistance:



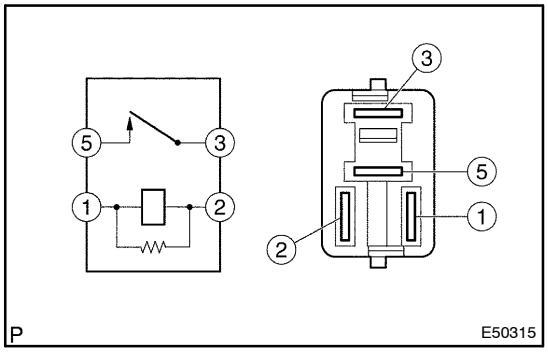
If resistance value is not as specified, replace the sensor.



6. COOLING UNIT MOTOR SUB–ASSY W/FAN (MANUAL AIR CONDITIONING)

(a) Connect the positive (+) lead from the battery to terminal 1 and negative (–) to terminal 2, then check that the motor operation smoothly.

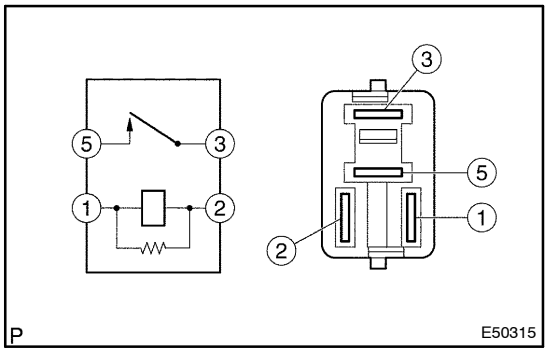
If operation is not as specified, replace the blower motor.



7. HEATER RELAY

Condition	Tester connection	Specified condition
Constant	1 – 2	Continuity
Apply B + between terminals 1 and 2.	3 – 5	Continuity

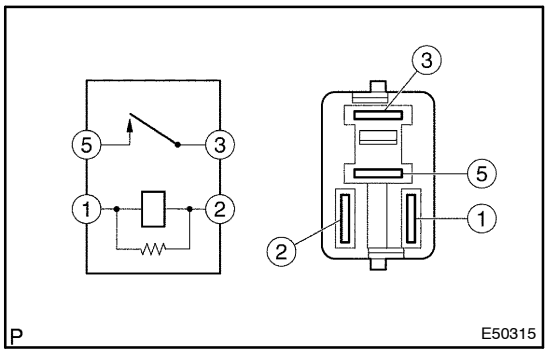
If continuity is not as specified, replace the heater relay.



8. MAGNETIC CLUTCH RELAY

Condition	Tester connection	Specified condition
Constant	1 – 2	Continuity
Apply B + between terminals 1 and 2.	3 – 5	Continuity

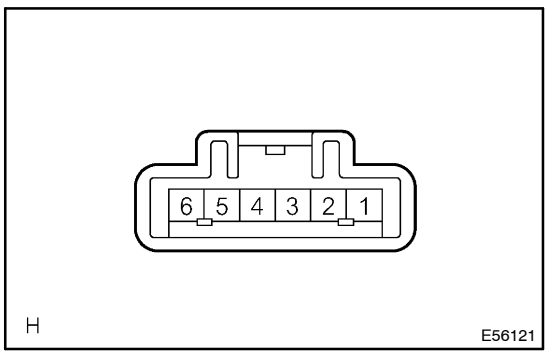
If continuity is not as specified, replace the magnetic clutch relay.



9. CONDENSER FAN RELAY

Condition	Tester connection	Specified condition
Constant	1 – 2	Continuity
Apply B + between terminals 1 and 2.	3 – 5	Continuity

If continuity is not as specified, replace the condenser fan relay.



10. IDLE UP SWITCH

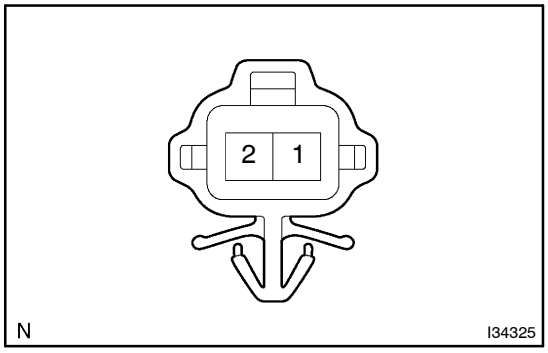
(a) Inspect switch continuity.
Check the continuity between terminals while switch is pressed, as shown in the chart.

Tester connection	Specified condition
3 – 4	Continuity

If continuity is not as specified, replace the switch.

(b) Inspect illumination operation.
Connect the positive (+) lead from the battery to terminal 1 and negative (–) lead to terminal 2 then check that the illuminations come on.

If operation is not as specified, replace the switch.

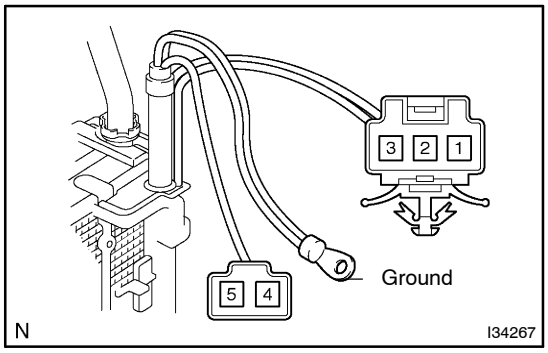


11. MAGNET VALVE ASSY

(a) Check the air passage through the valve with and without the battery positive voltage applied between terminals as shown in the chart.

Tester connection	Specified condition
Apply B+ between terminals	Free passage
Not apply B+ between terminals	No passage

If operation is not as specified, replace the magnetic valve assy.

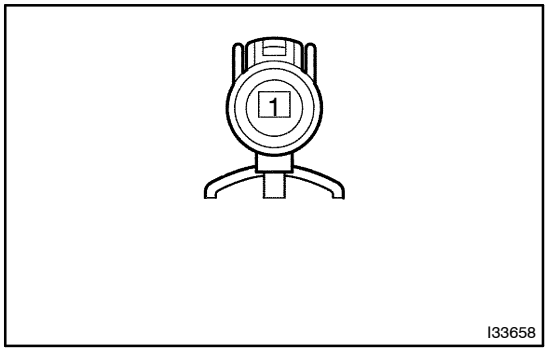


12. HEATER RADIATOR UNIT SUB–ASSY (W/ VISCOUS HEATER)

(a) Measure resistance between terminals as shown in the chart.

Tester connection	Specified condition
1 – Ground	Continuity
2 – 5	Continuity
3 – 4	Continuity

If continuity is not as specified, replace the heater radiator unit sub–assy.

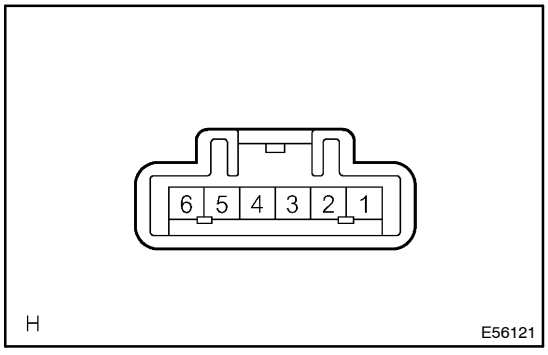


13. VISCOUS W/MAGNET CLUTCH HEATER ASSY (W/ VISCOUS HEATER)

(a) Connect the positive (+) lead from the battery to terminal 1 and the negative (–) lead to the body ground.

(b) Check that the magnetic clutch energized.

If operation is not as specified, replace the viscous w/ magnet clutch heater assy.



14. HETER SWITCH ASSY (W/ VISCOUS HEATER)

(a) Inspect switch continuity.

Check the continuity between terminals while switch is pressed, as shown in the chart.

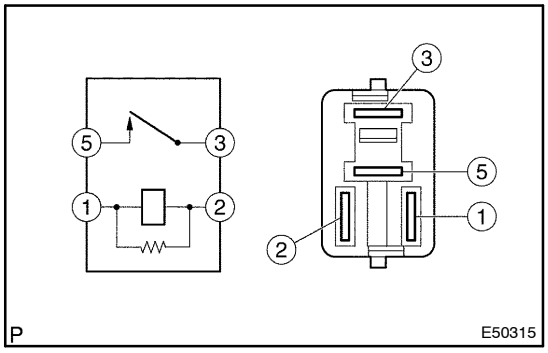
Tester connection	Specified condition
3 – 4	Continuity

If continuity is not as specified, replace the switch.

(b) Inspect illumination operation.

Connect the positive (+) lead from the battery to terminal 1 and negative (–) lead to terminal 2 then check that the illuminations come on.

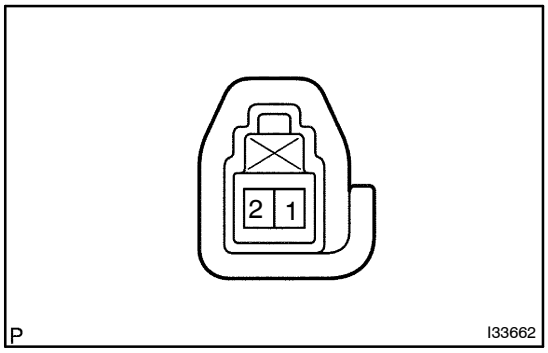
If operation is not as specified, replace the switch.



15. PTC HEATER RELAY (W/ VISCOUS HEATER)

Condition	Tester connection	Specified condition
Constant	1 – 2	Continuity
Apply B + between terminals 1 and 2.	3 – 5	Continuity

If continuity is not as specified, replace the PTC heater relay.

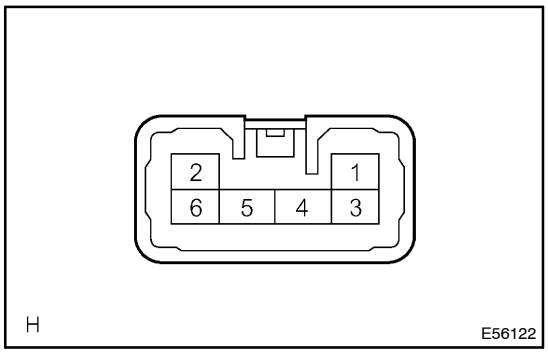


16. COOLER NO.2 THERMISTOR (W/ REAR COOLER)

(a) Inspect cooler thermistor continuity.

Tester connection	Specified condition
1 – 2	1,500 Ω at 25 °C (77 °F)

If continuity is not as specified, replace the cooler No. 2 thermistor.

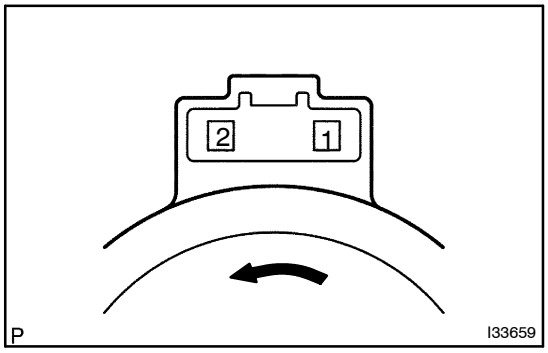


17. COOLER UNIT BLOWER RESISTOR (W/ REAR COOLER)

(a) Inspect blower resistor continuity.

Tester connection	Specified condition
2 – 6	0.09 – 0.11 Ω
5 – 6	0.46 – 0.52 Ω
4 – 6	0.55 – 0.63 Ω
3 – 6	1.48 – 1.70 Ω
1 – 6	3.15 – 3.63 Ω

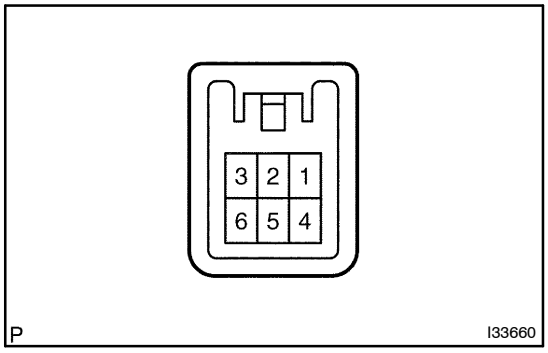
If continuity is not as specified, replace the cooler unit blower resistor.



18. BLOWER W/FAN (REAR) MOTOR SUB–ASSY (W/ REAR COOLER)

(a) Connect the positive (+) lead from the battery to terminal 2 and negative (–) to terminal 1, then check that the motor operation smoothly.

If operation is not as specified, replace the blower motor.



19. COOLER CONTROL PANEL (W/ REAR COOLER)

(a) Inspect switch continuity.

(1) Check the continuity between terminals while cooler switch is pressed, as shown in the chart.

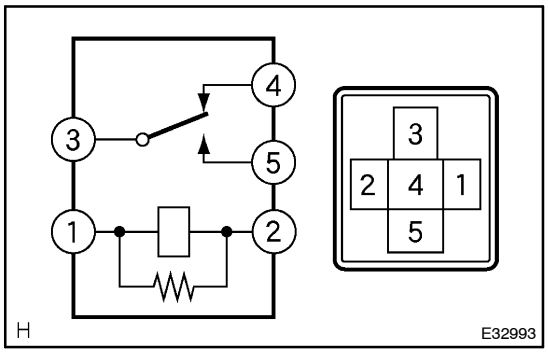
Tester connection	Specified condition
5 – 6	Continuity

If continuity is not as specified, replace the rear cooler control.

(b) Inspect illumination operation.

(1) Connect the positive (+) lead from the battery to terminal 6 and negative (–) lead to terminal 5 then check that the illuminations come on.

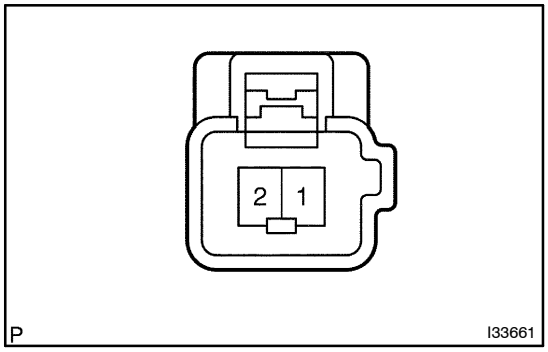
If operation is not as specified, replace the rear cooler control panel.



20. REAR COOLER RELAY (W/ REAR COOLER)

Condition	Tester connection	Specified condition
Constant	1 – 2	Continuity
Apply B + between terminals 1 and 2.	3 – 5	Continuity

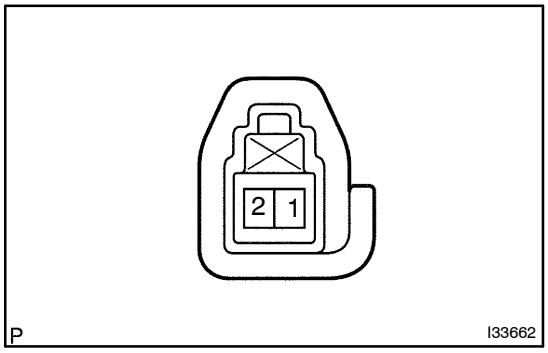
If continuity is not as specified, replace the rear cooler relay.



21. COOLER BLOWER MOTOR SUB–ASSY NO.1 (W/ COOL BOX)

(a) Connect the positive (+) lead from the battery to terminal 1 and negative (–) to terminal 2, then check that the motor operation smoothly.

If operation is not as specified, replace the cooler blower motor motor sub–assy No. 1.

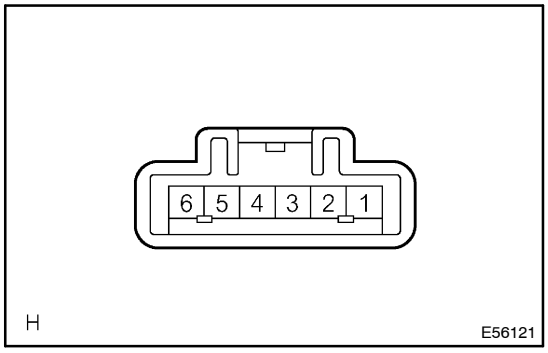


22. COOLER NO.3 THERMISTOR (W/ COOL BOX)

(a) Inspect cooler thermistor continuity.

Tester connection	Specified condition
1 – 2	1,500 Ω at 25 °C (77 °F)

If continuity is not as specified, replace the cooler No. 3 thermistor.



23. COOLER CONTROL SWITCH SUB–ASSY (W/ COOL BOX)

(a) Inspect switch continuity.

Check the continuity between terminals while switch is pressed, as shown in the chart.

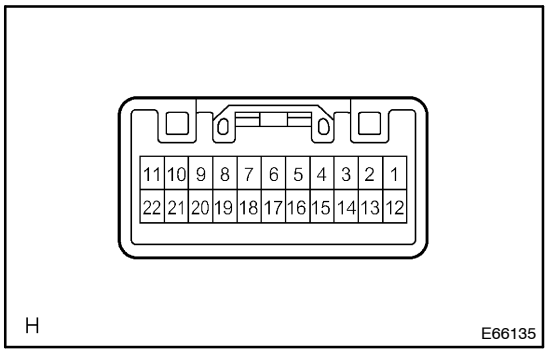
Tester connection	Specified condition
3 – 4	Continuity

If continuity is not as specified, replace the switch.

(b) Inspect illumination operation.

Connect the positive (+) lead from the battery to terminal 6 and negative (–) lead to terminal 5 then check that the illuminations come on.

If operation is not as specified, replace the switch.



24. AIR CONDITIONING CONTROL ASSY (W/ EMV & NAVIGATION SYSTEM)

(a) Inspect switch continuity.

Check the continuity between terminals while switch is pressed, as shown in the chart.

Tester connection	Select switch	Specified condition
2 – 11	UP DRIVER TEMP.	Continuity
3 – 11	DOWN DRIVER TEMP.	Continuity
4 – 11	AUTO	Continuity
5 – 11	OFF	Continuity
6 – 11	R/F	Continuity
7 – 11	REAR DEF	Continuity
8 – 11	FRONT DEF	Continuity
9 – 11	UP PASSENGER TEMP.	Continuity
10 – 11	DOWN PASSENGER TEMP.	Continuity

If continuity is not as specified, replace the A/C control assy.

(b) Inspect illumination operation.

Connect the positive (+) lead from the battery to terminal 12 and negative (–) lead to terminal 22 then check that the illuminations come on.

If continuity is not as specified, replace the bulb.