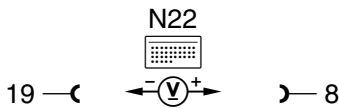
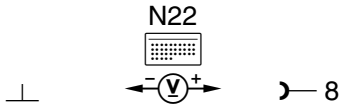
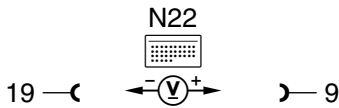
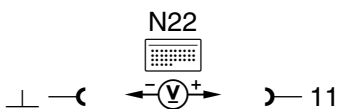
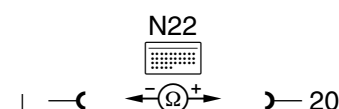
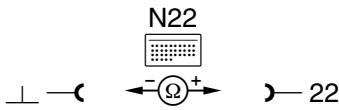
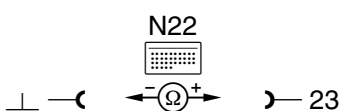


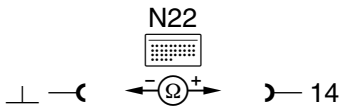
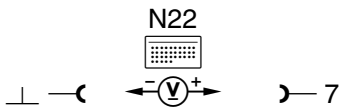
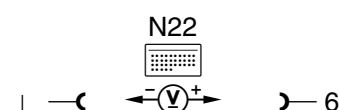
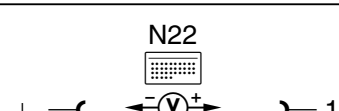
Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
1.0		AAC pushbutton control module (N22) Voltage supply Circuit 30		 on right connector	11 – 14 V	Wiring, ⇒ 1.1, Circuit 31
1.1		Circuit 30		 on right connector	11 – 14 V	Wiring, Circuit 31
2.0		Voltage supply Circuit 15		 on right connector Ignition: ON	11 – 14 V	Wiring.
3.0		Voltage supply Circuit 15x		 on left connector Ignition: ON	11 – 14 V	Wiring.
4.0	B1226 003	In-car temperature sensor (B10/4) Resistance		Ignition: OFF  on left connector Disconnect N22 from  .	$^{\circ}\text{C} \approx \text{k}\Omega$ $10 \approx 19.0 - 21.0$ $20 \approx 11.9 - 13.0$ $30 \approx 7.7 - 8.4$ $45 \approx 4.2 - 4.6$	Wiring, B10/4

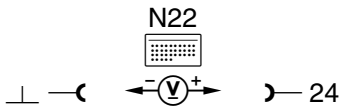
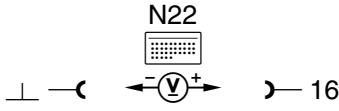
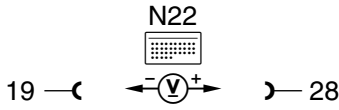
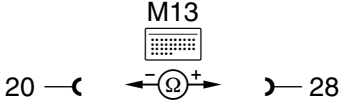
Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
5.0	B1230 007	Evaporator temperature sensor (B10/6) Resistance		Ignition: OFF  on left connector Disconnect N22 from  .	$^{\circ}\text{C} \hat{=} \text{k}\Omega$ 10 $\hat{=} 5.2 - 5.8$ 20 $\hat{=} 3.2 - 3.6$ 30 $\hat{=} 2.0 - 2.3$ 45 $\hat{=} 1.1 - 1.25$	Wiring, B10/6
6.0	B1233 B1241 010 013	Refrigerant temperature sensor (B12/1) Resistance		Ignition: OFF  on left connector Disconnect N22 from  .	$^{\circ}\text{C} \hat{=} \text{k}\Omega$ 20 $\hat{=} < 13$ 40 $\hat{=} < 5.5$ 50 $\hat{=} < 3.7$ 60 $\hat{=} < 2.5$ 70 $\hat{=} < 1.8$	Wiring, B12/1
7.0	B1228 005	Heater core temperature sensor (B10/1), left Resistance		Ignition: OFF  on left connector Disconnect N22 from  .	$^{\circ}\text{C} \hat{=} \text{k}\Omega$ 10 $\hat{=} 19.0 - 21.2$ 20 $\hat{=} 11.9 - 13.2$ 30 $\hat{=} 7.7 - 8.4$ 45 $\hat{=} 4.2 - 4.6$	Wiring, B10/1

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
8.0	81229 006	Heater core temperature sensor (B10/1), right Resistance		Ignition: OFF  on left connector Disconnect N22 from  .	$^{\circ}\text{C} \hat{=} \text{k}\Omega$ 10 $\hat{=}$ 19.0 – 21.2 20 $\hat{=}$ 11.9 – 13.2 30 $\hat{=}$ 7.7 – 8.4 45 $\hat{=}$ 4.2 – 4.6	Wiring, B10/1
9.0	81232 81241 009 013	Refrigerant pressure sensor (B12) Voltage supply		 on left connector. Ignition: ON	4.75 – 5.25 V	Wiring, B12, N22
10.0	81234 011	Sun sensor (B32) Voltage supply		 on left connector. Ignition: ON	0 – 4.5 V	Wiring, N22
11.0		Diagnostic output Voltage		 on left connector. Ignition: ON	11 – 14 V	Wiring, N22

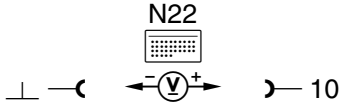
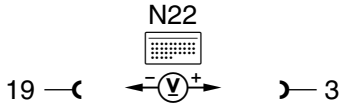
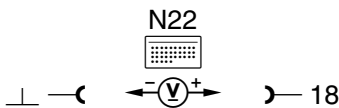
Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
12.0	81235 012	Emissions sensor (B31) Voltage		 on left connector. Ignition: ON	4 – 6 V	Wiring, N22
13.0	81421 023	Auxiliary fan (M4) Voltage		 on right connector Ignition: ON Press both AUTO > 10 secs. Ignition: OFF (when done)	> 2.0 V M4 runs.	Wiring, N22, N65
14.0		A/C Pushbutton control module (N22), 12 V Output Voltage		Ignition: ON  on right connector.	11 – 14 V	Wiring, N22
15.0	81416 014	Coolant circulation pump (M13) Resistance		 on right connector Ignition: OFF Disconnect N22 from  .	2 – 4 Ω	Wiring, M13

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
16.0	81417 019 81418 020	Duovalve (Y21) Resistance (right/left)	 21 —(—  —) 12	Ignition: OFF Disconnect N22 from  .	30 – 45 Ω	Wiring, Y21
17.0		Blower regulator (A32n1) Activation Voltage	 19 —(—  —) 1	 on right connector Ignition: ON  MAX > 0.7 V MIN > 0.5 V		Wiring, A32
18.0	81423 025	Switchover valve block (Y11), Voltage	 6 —(—  —) 28	 on right connector Ignition: ON	< 1 V	Wiring.
19.0	81419 021	A/C compressor (A9) Activation Voltage	 19 —(—  —) 25	 on right connector Engine: At Idle A/C compressor:  A/C compressor: 	< 1 V 11 – 14 V	Wiring, N22
20.0	81424 026 81425 027	Activated charcoal filter actuator (A32m2) Resistance	 13 —(—  —) 22	Ignition: OFF Disconnect N22  .	50 – 80 Ω	Wiring, A32m2, N22

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
21.0	81422 024	Serial interface (instrument cluster) (K1) Voltage		 on right connector. Ignition: ON	6 – 8 V	Wiring.
22.0		REST Voltage		 on right connector Ignition: ON	11 – 14 V	Wiring.
23.0	81459 059	Serial interface (instrument cluster) (K2) Voltage		 on left connector Ignition: ON	6 – 8 V	Wiring.