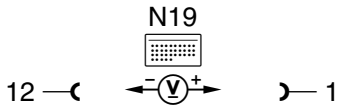
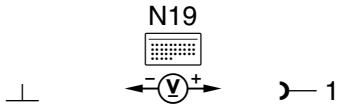
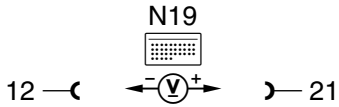
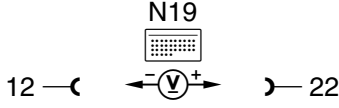
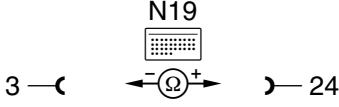


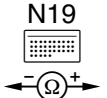
2.4 Air Conditioning (A/C) (Tempmatic)

Model 170

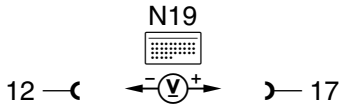
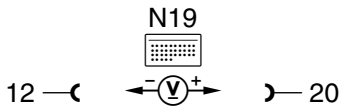
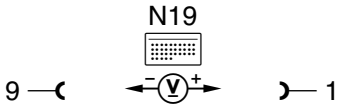
Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
1.0		Voltage supply Circuit 30			11-14 V	Wiring, Circuit 31, ⇒ 1.1
1.1		Circuit 30			11-14 V	Wiring.
2.0		Voltage supply Circuit 15		Ignition: ON	11-14 V	Wiring.
3.0		Voltage supply Circuit 15x		Ignition: ON	11-14 V	Wiring.
4.0	B1230	Evaporator temperature sensor (B10/6) Resistance		Ignition: OFF Disconnect N19 from  .	°C ≙ kΩ 10 ≙ 5.2 – 5.8 20 ≙ 3.2 – 3.6 30 ≙ 2.0 – 2.3 45 ≙ 1.1 – 1.25	Wiring, B10/6

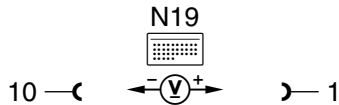
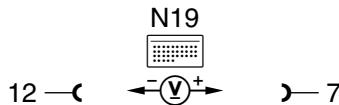
Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
5.0	B1228	Left heater core temperature sensor (B10/1) Resistance		Ignition: OFF Disconnect N19 from  .	$^{\circ}\text{C} \hat{=} \text{k}\Omega$ $10 \hat{=} 19.0\text{--}21.2$ $20 \hat{=} 11.9\text{--}13.2$ $30 \hat{=} 7.7\text{--}8.4$ $45 \hat{=} 4.2\text{--}4.6$	Wiring, B10/1
6.0	B1229	Right heater core temperature sensor (B10/2) Resistance		Ignition: OFF Disconnect N19 from  .	$^{\circ}\text{C} \hat{=} \text{k}\Omega$ $10 \hat{=} 9.0\text{--}21.2$ $20 \hat{=} 1.9\text{--}13.2$ $30 \hat{=} 7.7\text{--}8.4$ $45 \hat{=} 4.2\text{--}4.6$	Wiring, B10/6
7.0	B1232	Refrigerant pressure sensor (B12) Voltage		Ignition: ON	$\text{bar} \hat{=} \text{V}$ $2 \hat{=} 0.5\text{--}0.75$ $10 \hat{=} 1.4\text{--}1.8$ $18 \hat{=} 2.4\text{--}2.8$ $28 \hat{=} 3.5\text{--}4.0$	Wiring, B12, ⇒ 7.1, N19
7.1		Voltage		Ignition: ON	4.75-5.25 V	Wiring, B12, N19

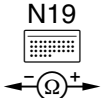
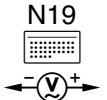
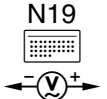
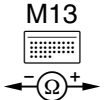
Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
8.0		Diagnostic output		Ignition: ON	8-11 V	Wiring, N19
9.0	B1419	A/C compressor (A9) Activation		Engine: At Idle A/C compressor:  is illuminated. A/C compressor:  is not illuminated.	<1 V 11-14 V	Wiring, A9, N19
10.0	B1417	Left-side water valve (Y21/1) Voltage		Ignition: ON Temperature selector wheels: Red range detent Blue range detent	After > 5 seconds: <1 V 11 – 14 V	Wiring, ⇒ 10.1, N19
10.1	B1417	Resistance		Ignition: OFF Disconnect N19 from  .	25-40 Ω	Y21

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy																				
11.0		Right-side water valve (Y21/2) Voltage		Ignition: ON Temperature selector wheels: Red range detent Blue range detent	<1 V 11 – 14 V	Wiring, ⇒ 11.1, N19																				
11.1		Resistance		Ignition: OFF Disconnect N19 from  .	25-40 Ω	Y21																				
12.0		Blower regulator (A32n1) Voltage		Ignition: ON Blower switch in fan stage: <table><tr><td>1</td><td>1.1 – 1.8 V</td></tr><tr><td>2</td><td>2.0 – 2.6 V</td></tr><tr><td>3</td><td>2.8 – 3.3 V</td></tr><tr><td>4</td><td>3.6 – 4.3 V</td></tr><tr><td>5</td><td>5.0 – 6.0 V</td></tr></table>	1	1.1 – 1.8 V	2	2.0 – 2.6 V	3	2.8 – 3.3 V	4	3.6 – 4.3 V	5	5.0 – 6.0 V	<table><tr><td>1</td><td>1.1 – 1.8 V</td></tr><tr><td>2</td><td>2.0 – 2.6 V</td></tr><tr><td>3</td><td>2.8 – 3.3 V</td></tr><tr><td>4</td><td>3.6 – 4.3 V</td></tr><tr><td>5</td><td>5.0 – 6.0 V</td></tr></table>	1	1.1 – 1.8 V	2	2.0 – 2.6 V	3	2.8 – 3.3 V	4	3.6 – 4.3 V	5	5.0 – 6.0 V	Wiring, N19
1	1.1 – 1.8 V																									
2	2.0 – 2.6 V																									
3	2.8 – 3.3 V																									
4	3.6 – 4.3 V																									
5	5.0 – 6.0 V																									
1	1.1 – 1.8 V																									
2	2.0 – 2.6 V																									
3	2.8 – 3.3 V																									
4	3.6 – 4.3 V																									
5	5.0 – 6.0 V																									

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
13.0	B1454	Fresh/recirculated air flap switchover valve (Y13) Resistance		Disconnect N19 from  .	40-55 Ω	Wiring.
14.0	B1422	Serial Interface K1		Engine: At Idle	> 1.5 V ~	Wiring, See connection of components, 21
15.0	B1459	Serial Interface K2		Engine: At Idle	> 0.2 V ~	Wiring, See connection of components, 21
16.0	B1416	Coolant circulation pump (M13) Resistance (as of 09/97)		 to right hand connector, Ignition: OFF Disconnect  from N22	3-7 Ω	Wiring, M13