
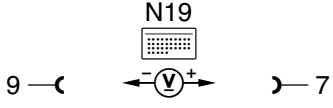
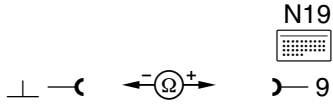

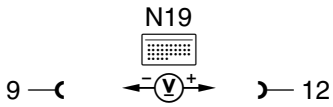


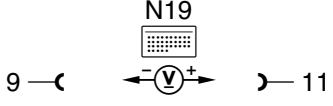

















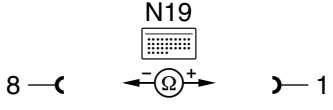

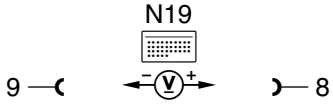
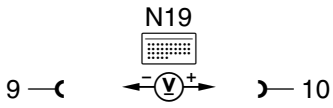


### Electrical Test Program – Test

| ⇒   |  | Test scope   | Test connection   | Test condition   | Nominal value  | Possible cause/Remedy |    |    |           |                  |           |                |     |                  |
|-----|---|--|---|--|--|-----------------------|----|----|-----------|------------------|-----------|----------------|-----|------------------|
| 1.0 |   | <b>Voltage supply<br/>Circuit 15</b>                             |    | <b>Ignition: ON</b>  | 11-14 V  | Wiring.               |    |    |           |                  |           |                |     |                  |
| 2.0 |   | <b>Ground circuit 31<br/>Resistance</b>                          |    | <b>Ignition: OFF</b><br>Disconnect N19 from   | 0 Ω  | Wiring.               |    |    |           |                  |           |                |     |                  |
| 3.0 |   | <b>In-car temperature<br/>sensor (B10/4)<br/>Voltage</b>         |    | <b>Ignition: ON</b><br>Temperature selector:<br>Red range detent   | <table border="0"> <tr> <td>°C</td> <td>V</td> </tr> <tr> <td>20</td> <td>1.9</td> </tr> </table>  | °C                    | V  | 20 | 1.9       | Wiring,<br>B10/4 |           |                |     |                  |
| °C  | V   |  |   |  |  |                       |    |    |           |                  |           |                |     |                  |
| 20  | 1.9   |  |   |  |  |                       |    |    |           |                  |           |                |     |                  |
| 3.1 |   | <b>In-car temperature<br/>sensor (B10/4)<br/>Resistance</b>      |   | <b>Ignition: OFF</b><br>Disconnect N19 from  | <table border="0"> <tr> <td>°C</td> <td>kΩ</td> </tr> <tr> <td>20</td> <td>2.1</td> </tr> <tr> <td>25</td> <td>1.7</td> </tr> <tr> <td>40</td> <td>0.9</td> </tr> </table> | °C                    | kΩ | 20 | 2.1       | 25               | 1.7       | 40             | 0.9 | Wiring,<br>B10/4 |
| °C  | kΩ  |  |   |  |  |                       |    |    |           |                  |           |                |     |                  |
| 20  | 2.1   |  |   |  |  |                       |    |    |           |                  |           |                |     |                  |
| 25  | 1.7   |  |   |  |  |                       |    |    |           |                  |           |                |     |                  |
| 40  | 0.9   |  |   |  |  |                       |    |    |           |                  |           |                |     |                  |
| 4.0 |   | <b>Icing protection<br/>temperature sensor (R35)<br/>Voltage</b> |  | <b>Ignition: ON</b>  | <table border="0"> <tr> <td>°C</td> <td>V</td> </tr> <tr> <td>0</td> <td>2.0 – 2.4</td> </tr> <tr> <td>15</td> <td>1.4 – 1.8</td> </tr> </table>                           | °C                    | V  | 0  | 2.0 – 2.4 | 15               | 1.4 – 1.8 | Wiring,<br>R35 |     |                  |
| °C  | V   |  |   |  |  |                       |    |    |           |                  |           |                |     |                  |
| 0   | 2.0 – 2.4   |  |   |  |  |                       |    |    |           |                  |           |                |     |                  |
| 15  | 1.4 – 1.8   |  |   |  |  |                       |    |    |           |                  |           |                |     |                  |

Electrical Test Program – Test

| ⇒   |  | Test scope   | Test connection  | Test condition  | Nominal value  | Possible cause/Remedy |
|-----|---|--|--|---|--|-----------------------|
| 4.1 |   | <b>Icing protection temperature sensor (R35)</b><br>Resistance         | <br>11 —  —  — 3      | Ignition: <b>OFF</b><br>Disconnect N19 from  . | °C    kΩ<br>6     3.6<br>15    2.3<br>22    1.7<br>25    1.5 | Wiring,<br>R35        |
| 5.0 |   | <b>Activation voltage Temperature reduction</b><br>Voltage             | <br>9 —  —  — 2       | Ignition: <b>ON</b><br>Temperature selector:<br>From blue range detent<br><br>turn temperature selector<br>to red detent stop     | >2 V<br><br>>3 V   | Wiring,<br>S98s2      |
| 5.1 |   | <b>Activation voltage Temperature increase</b><br>Voltage              | <br>9 —  —  — 5     | Ignition: <b>ON</b><br>Temperature selector:<br>From blue range detent<br><br>turn temperature selector<br>to red detent stop     | >3 V<br><br>>4 V   | Wiring,<br>S98s2      |
| 6.0 |   | <b>Actuator motor Blend air flap actuator motor (M16/8)</b><br>Voltage | <br>9 —  —  — 1 | Ignition: <b>ON</b><br>Temperature selector:<br>From blue range detent<br><br>turn temperature selector<br>to red detent stop     | <1V<br><br>11-14 V   | Wiring,<br>M16/8      |

### Electrical Test Program – Test

| ⇒   |  | Test scope   | Test connection  | Test condition   | Nominal value         | Possible cause/Remedy |
|-----|---|--|--|--|-----------------------|-----------------------|
| 6.1 |   | <b>Actuator motor<br/>Blend air flap actuator<br/>motor (M16/8)</b><br>Resistance                      |   | Ignition: <b>OFF</b><br>Disconnect N19 from  .  | 0.12 kΩ               | Wiring,<br>M16/8      |
| 7.0 |   | <b>Actuator motor<br/>Blend air flap actuator<br/>motor (M16/8)</b>                                    |   | Ignition: <b>ON</b><br>Temperature selector:<br>From Red range detent<br>stop<br><br>turn temperature selector<br>to blue detent   | <1 V<br><br>11-14 V   | Wiring,<br>M16/8      |
| 8.0 |   | <b>Activation of:<br/>A/C switch (S98s3) to A/C<br/>pushbutton control<br/>module (N19)</b><br>Voltage |  | Ignition: <b>ON</b><br> button is illuminated.<br>Blower stage 4<br><br> button is <b>not</b><br>illuminated, <b>OR</b><br>Blower stage= 0 | <1 V<br><br>11 – 14 V | Wiring,<br>S98s3      |

Electrical Test Program – Test

| ⇒    |     | Test scope  | Test connection | Test condition  | Nominal value  | Possible cause/Remedy  |    |    |     |    |     |    |     |    |     |                  |
|------|-----|---|-----------------|---|--|------------------------|----|----|-----|----|-----|----|-----|----|-----|------------------|
| 8.1  |     | <b>Activation of:<br/>A/C pushbutton control<br/>module (N19) to All Activity<br/>Module (N10)</b><br>Voltage |                 | Ignition: <b>ON</b><br>button is illuminated.<br>Blower stage 4<br>Insert bridge:<br>124 589 37 63 00 | >3 V<br><br><1 V   | Wiring,<br>N19         |    |    |     |    |     |    |     |    |     |                  |
| 9.0  |     | <b>Refrigerant pressure<br/>sensor (B12)</b>  |                 | Disconnect refrigerant<br>pressure sensor connector<br>Ignition: <b>ON</b>                            | 4.75-5.25 V  | Wiring,<br>B12,<br>N10 |    |    |     |    |     |    |     |    |     |                  |
| 10.0 |     | <b>Outside temperature<br/>sensor<br/>(B10/5)</b><br>Resistance<br>(as of 12/99)                              |                 | Ignition: <b>OFF</b><br>Disconnect N19 from<br>   | <table border="0"> <tr> <td>°C</td> <td>kΩ</td> </tr> <tr> <td>20</td> <td>2.1</td> </tr> <tr> <td>25</td> <td>1.7</td> </tr> <tr> <td>40</td> <td>0.9</td> </tr> <tr> <td>50</td> <td>0.6</td> </tr> </table> | °C                     | kΩ | 20 | 2.1 | 25 | 1.7 | 40 | 0.9 | 50 | 0.6 | Wiring,<br>B10/5 |
| °C   | kΩ  |   |                 |   |  |                        |    |    |     |    |     |    |     |    |     |                  |
| 20   | 2.1 |   |                 |   |  |                        |    |    |     |    |     |    |     |    |     |                  |
| 25   | 1.7 |   |                 |   |  |                        |    |    |     |    |     |    |     |    |     |                  |
| 40   | 0.9 |   |                 |   |  |                        |    |    |     |    |     |    |     |    |     |                  |
| 50   | 0.6 |   |                 |   |  |                        |    |    |     |    |     |    |     |    |     |                  |