



## BELIEF AIR HEATER FAULT CODES

| Error Code                                                                 | Fault                                                                                                                                                                            | Solution                                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>00</b>                                                                  | No Fault                                                                                                                                                                         | 0                                                                                                                                                                                                                                                                                                                                   |
| <b>10</b><br><b>12</b>                                                     | Start Failure in normal situation<br>Start Failure in oxygen situation                                                                                                           | A. Check whether air inlet pipe or exhaust pipe is blocked<br>B. Check whether the fuel pipe is blocked or the fuel in the tank is enough<br>C. Check whether fuel mass is appropriate<br>D. Check the resistance of the glow plug in normal temperature (0.2Ω/12V, 1Ω/24V)<br>E. Clean the carbon deposition<br>F. Replace the ECU |
| <b>20</b><br><b>24</b>                                                     | Combustion termination in normal situation<br>Combustion termination in oxygen situation                                                                                         | A. Check whether there is air bubble in the fuel pipe<br>B. Check the fuel volume of the fuel pump<br>C. Check the resistance of the glow plug in normal temperature (0.2Ω/12V, 1Ω/24V)<br>D. Clean the carbon deposition<br>E. Replace the burner                                                                                  |
| <b>30</b><br><b>31</b>                                                     | Voltage over high<br>Voltage over low                                                                                                                                            | A. Measure the voltage of the battery: not lower than 10.5 (21)V, not higher than 16(32)V<br>B. If the voltage is lower than normal, change the battery<br>C. Check whether the connection between the harness and battery is loose, whether the terminal is loose                                                                  |
| <b>41</b><br><b>42</b>                                                     | The temperature in the furnace over high before ignition<br>Furnace overheat                                                                                                     | A. Check whether air inlet and outlet are blocked<br>B. Ventilate the furnace to drop temperature<br>C. Check the furnace sensor (resistance approx 1.1kΩ in normal temperature)<br>D. Replace the ECU                                                                                                                              |
| <b>50</b>                                                                  | Flame sensor open circuit                                                                                                                                                        | Replace the flame sensor                                                                                                                                                                                                                                                                                                            |
| <b>51</b>                                                                  | Flame sensor short circuit                                                                                                                                                       | Replace the flame sensor                                                                                                                                                                                                                                                                                                            |
| <b>52</b>                                                                  | Heating temperature sensor open circuit                                                                                                                                          | Replace the heating temperature sensor                                                                                                                                                                                                                                                                                              |
| <b>53</b>                                                                  | Heating temperature sensor short circuit                                                                                                                                         | Replace the heating temperature sensor                                                                                                                                                                                                                                                                                              |
| <b>65</b><br><b>66</b><br><b>68</b><br><b>69</b>                           | Air inlet temperature sensor open circuit<br>Air inlet temperature sensor short circuit<br>External temperature sensor open circuit<br>External temperature sensor short circuit | Replace the ECU                                                                                                                                                                                                                                                                                                                     |
| <b>70</b><br><b>71</b>                                                     | Fuel pump open circuit<br>Fuel pump short circuit                                                                                                                                | A. Check whether the lead of the fuel pump is broken<br>B. Check whether the connection of the lead is fastened<br>C. Replace the fuel pump<br>D. Replace the ECU                                                                                                                                                                   |
| <b>80</b><br><b>81</b><br><b>82</b><br><b>83</b><br><b>84</b><br><b>85</b> | Fan motor open circuit<br>Fan motor short circuit<br>Fan speed is too low<br>Fan speed is too high<br>Fan speed measurement fault<br>Fan motor start failure                     | A. Check whether the fan wheel is stuck<br>B. Check whether the fan motor lead is fastened<br>C. Replace the ECU                                                                                                                                                                                                                    |

| Error Code                                       | Fault                                                                                                                | Solution                                                                                                                                                                                                                                     |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>90</b><br><b>91</b><br><b>92</b><br><b>93</b> | Glow plug open circuit<br>Glow plug short circuit<br>Glow plug unmatched (or broken)<br>Glow plug drive open circuit | A. Check the battery voltage<br>B. Check the resistance of the glow plug in normal temperature (0.2Ω/12V, 1Ω/24V)<br>C. Clean the carbon deposition on the glow plug<br>D. Replaced the ECU                                                  |
| <b>a2</b><br><b>a4</b>                           | Furnace temperature over high during heating process<br>Inlet air temperature over high before ignition              | A. Check whether the inlet air is over 35 degree before heater start<br>B. Whether the upper cover of the outer cover is tightly closed<br>C. Whether the inlet and outlet are blocked<br>D. Whether the exhaust air was sucked to the inlet |
| <b>a9</b>                                        | Abnormal power out/power off                                                                                         | A. The heater did not completely stop before the power off<br>B. The power supply voltage is deficient<br>C. Poor contact between the positive and negative power cords of the power supply                                                  |
| <b>b4</b><br><b>b5</b>                           | Furnace temperature sensor open circuit<br>Furnace temperature sensor short circuit                                  | A. Check whether the sensor lead is broken<br>B. Check the sensor resistance (approx 1.1kΩ in normal temperature) if abnormal, replace it<br>C. Replace the ECU                                                                              |
| <b>c0</b><br><b>c1</b>                           | Heater within the car is open circuit<br>Heater within the car is short circuit                                      | Check the car's heater                                                                                                                                                                                                                       |
| <b>c4</b><br><b>c5</b>                           | Control switch open circuit<br>Control switch short circuit                                                          | Replace the control switch                                                                                                                                                                                                                   |
| <b>d0</b>                                        | ECU was fault                                                                                                        | Replace the ECU                                                                                                                                                                                                                              |
| <b>d1</b>                                        | Information saved failed                                                                                             | No specific operation                                                                                                                                                                                                                        |
| <b>d3</b>                                        | Maintenance warning                                                                                                  | Restart the heater                                                                                                                                                                                                                           |
| <b>e0</b>                                        | No starting signal                                                                                                   | Replace the ECU                                                                                                                                                                                                                              |
| <b>e1</b>                                        | No driving voltage of the glow plug                                                                                  | Replace the ECU                                                                                                                                                                                                                              |
| <b>e2</b>                                        | Glow plug measurement circuit is faulty                                                                              | Replace the ECU                                                                                                                                                                                                                              |