

MINI radiator fan failure

The radiator fan resistor on the BMW Mini (2001 - 2006) can fail, resulting in one or both of the fan speeds no longer working, potentially causing overheating issues. Blue Print explains the steps to fix this problem.

The resistor is attached to the radiator fan and cowling assembly and is not available separately from BMW. Blue Print has the solution in the form of ADB111402.

Allow approx 1.4 hours to remove and refit the fan cowling, and a further 30 minutes to replace the resistor.

Tools required to replace the resistor:

(not including those to remove the fan and cowling):

- 8mm spanner or ratchet and socket
- Wire cutter/crimping tool
- Heat gun

Replacing the resistor pack

First you will need to remove the radiator fan assembly from the vehicle in order to gain access to the resistor pack.

Once removed, you will see the resistor pack on the top of the cowling, which is held on by two 8mm screws. (Figure 1)

Remove the two screws to release the resistor pack and then remove its cover. (Figure 2)

Next, cut the three wires as close to the terminals as possible and strip the ends of the wires ready for connecting to the new

resistor pack. (Figure 3)

Locate the new resistor (without cover) into place on the fan cowling and cut the wires to length, allowing for the connectors and a little slack, and strip the ends of the wires.

Using the supplied heat shrink butt connectors, connect the following wires together (Figure 4):

- The solid red wire of the new resistor to the larger of the two red wires of the original harness.
- The red wire with black stripe of the new resistor to the smaller of the two red wires of the original harness.
- The green wire of the new resistor to the blue wire of the original harness

Once firmly crimped, apply heat to the connectors to activate the heat shrink and form a waterproof connection. (Figure 5)

Fit the resistor's cover and tighten the two 8mm screws.

Refit the fan assembly to the vehicle.

