

INSTALLATION GUIDE

BMW & MINI heater flap repair

Cold (or hot) air from one side only? The fault is usually in the mixing-flap mechanism inside the heater box. This guide helps you find out which part is broken and walks you through fitting the right kit – through the footwell trim, without removing the dashboard.

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Mixed air: initialization fault

1. Find out which fix you need

Remove the kick panel (footwell trim), unplug the flap actuator and take out its two screws. Then turn the shaft gently by hand. How far it turns tells you what is broken.

Most common

Shaft stops at its end positions

Broken stops

The plastic end stops inside the heater box have cracked, so the actuator fails its calibration and gives up – usually leaving one side stuck on full cold or full hot.

Fix: reinforced stops fitted between the actuator and the heater box. See section A.

Heater Fix Kit – left & right →

heater-fix.com/products/heater-fix-for-bmw-and-mini

Less common

Shaft turns more than 70°

Broken shaft

The shaft has snapped and is no longer connected to the mixing flap, so temperature control fails completely.

Fix: drill an access hole with the guide and fit a new shaft and stop insert. See section B. Right-hand side only for now.

Broken Shaft Complete Repair Kit →

heater-fix.com/products/broken-shaft-complete-repair-kit

Tools you need

Basic hand tools to remove the trim and the actuator, and a diagnostic tool to clear the fault codes afterwards. The broken-shaft repair also needs a drill, a 29 mm (1 1/8") hole saw (included in the complete kit) and a vacuum cleaner.

Before you start: switch the ignition off before you unplug the actuator. Work carefully around the heater box – the plastic is brittle.

Installing the Heater Fix Kit

01 Remove the kick panel

Detach the kick panel (footwell trim) to reach the actuator.

02 Remove the actuator

- Make sure the ignition is off, then unplug the actuator's electrical connector.
- Unscrew the two screws holding the actuator in place.

03 Check the shaft

- Turn the shaft by hand – you should be able to move it into both the cold and the hot position.
- Leave the shaft in the position that gives the temperature you want.

04 Temporary fix while you wait for the kit

Refit the actuator *without* connecting the plug. The flap then stays in the position you set.

05 Fit the reinforced stops

- When the kit arrives, remove the actuator again.
- Fit the stops from the kit (parts are marked **L** and **R** for left and right side).
- Check that the shaft can turn and reaches the stops in both the hot and the cold position.

06 Refit the actuator

- Fit the actuator with the **longer screws** from the kit.
- Reconnect the electrical plug and refit the kick panel.

07 Clear the fault codes

Use a diagnostic tool to clear the fault codes in the climate controller.

Result: you should have full temperature control on both sides again.



Heater Fix Kit: reinforced stops and longer screws.

Buy the Heater Fix Kit →

heater-fix.com/products/heater-fix-for-bmw-and-mini

Installing the Broken Shaft Complete Repair Kit

01 Get access to the actuator

- Remove the trim panels needed to expose the actuator.
- Make sure the ignition is off, then unplug the actuator's electrical connector.

02 Remove the actuator

Remove the two screws holding the actuator in place.

03 Confirm the shaft is broken

If the shaft turns more than 70°, it is broken.

04 Drill the access hole

- Fit the drill guide from the kit in its position on the heater box.
- Drill through the guide with the 29 mm hole saw **without** the centre drill bit.

05 Clean up

Remove the drill guide and vacuum all drilling debris out of the heater unit.



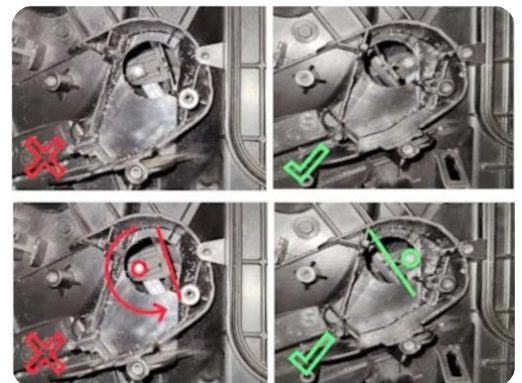
Broken Shaft Complete Repair Kit: drill guide, 29 mm hole saw, replacement shaft and stop insert.

Buy the Broken Shaft Kit →

heater-fix.com/products/broken-shaft-complete-repair-kit

06 Check the position of the mixing flap

- The mixing flap can be turned into a wrong position. Look through the hole – you should be able to see the connecting rod where it joins the mixing flap.
- The connection must be on the forward / upper part of the flap. If it is not, turn the flap counter-clockwise until it is (see pictures: red = wrong, green = correct).



Red: wrong position. Green: correct position.

07 Fit the replacement parts

- Optional: apply sealant or glue to the flap/shaft joint for extra stability.
- Push the new shaft in until it clicks and engages with the mixing flap.
- Turn the shaft by hand and check that the flap moves smoothly.
- Fit the stop insert, making sure the shaft is aligned correctly.

08 Reassemble

- Refit the actuator with the original screws and reconnect the plug.
- Refit all trim panels.

09 Clear the fault codes

Use a diagnostic tool to clear the fault codes in the climate controller.

Result: the heater should work again with normal temperature control. If you have a broken shaft on the left-hand side, please contact us at info@heater-fix.com.

COMPATIBILITY

Cars covered by the service bulletins

BMW and MINI have acknowledged this fault in service bulletins to their dealers. The official fix is a new heater box, which means removing the dashboard – owners on forums report bills of £2,000+.

MINI	SI M64 02 21	BMW	SI B64 06 21
Cooper	2014–2021	i3, i3s (incl. Range Extender)	2016–2021
Cooper S	2014–2017, 2019–2021	228i / M235i Gran Coupe xDrive	2016–2021
Cooper SE	2021	X1 sDrive28i / xDrive28i	2016–2021
Clubman	2017	X2 sDrive28i / xDrive28i / M35i	2016–2021
John Cooper Works	2018, 2021		

The kits

For broken stops

Heater Fix Kit – left & right

Reinforced stops and longer screws. Parts are marked L / R, so one kit covers either side.

[View the Heater Fix Kit →](#)

heater-fix.com/products/heater-fix-for-bmw-and-mini

For a broken shaft · right-hand side

Broken Shaft Complete Repair Kit

Drill guide, 29 mm hole saw, replacement shaft and stop insert – everything you need for the repair.

[View the Broken Shaft Kit →](#)

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Heater Fix is an independent repair kit and is not an official BMW / MINI part.

Questions? info@heater-fix.com