Issue 1.3 June 2018

TB102

Applies to models:

NVx, NVS, VPC, OUH, CPX, CP & HEM

powrmatic

Instruction for rerofitting the High Limit Reset Kit

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General Information

The original Honeywell Fan/Limit Stat (with red and white button - see fig.1) used on several Powrmatic heaters are no longer available.

The replacement Honeywell Stat (see fig.2) requires an additional Limit Interface Box to be wired in conjunction with the stat.

This kit and following procedures can be used on any Powrmatic heater which utilised the original Honeywell limit stat.

This bulletin describes the parts required and procedures to be carried out when replacing the original fan/limit stat with the new retrofit kit.

fig.1 Obsolete Honeywell Fan/Limit Stat

fig.2 New Honeywell Fan/Limit Stat

Parts & tools required

Flat head screwdriver

Electrical screwdriver

8mm Nut runner

Crimping tool

Wire strippers

High Limit Reset retrofit kit pt 142403600/KIT consisting of:

1 x High Limit Interface Box	pt ECP/LIBRESET/BLK
1 x Fan/Limit Stat	pt 143000306
1 x 3 Way terminal strip	pt 143100563
7 x White bootlace ferrules	pt 140701310
4 x Self drilling screws	pt 180000984
Technical bulletin	TB102

High Limit Reset retrofit kit pt 142403600/KIT/CPX-CD consisting of:

1 x High Limit Interface Box	pt ECP/LIBRESET/BLK
2 x Fan/Limit Stats	pt 143000306
1 x 3 Way terminal strip	pt 143100563
9 x White bootlace ferrules	pt 140701310
4 x Self drilling screws	pt 180000984
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Procedure

***WARNING:** Always switch off and disconnect electricity supply and close service valve before carrying out any servicing or replacement of failed components.*

section 1

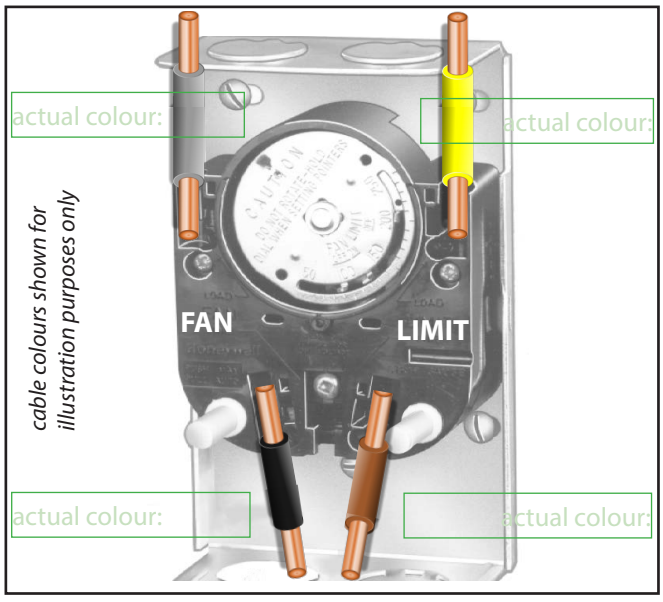
IMPORTANT: This section must NOT be used for Counterflow Direction CP or CPx cabinet heaters - refer to section 2

Position the Limit Interface Box on one of bottom panels close to the electrical panel and fix using self tapping screws provided.

Thread the seven core cable through the heater control box to the burner terminal strip. Cut off any excess cable and expose the 7 wire strands.

All stranded wires should be terminated using the crimp ferrules provided.

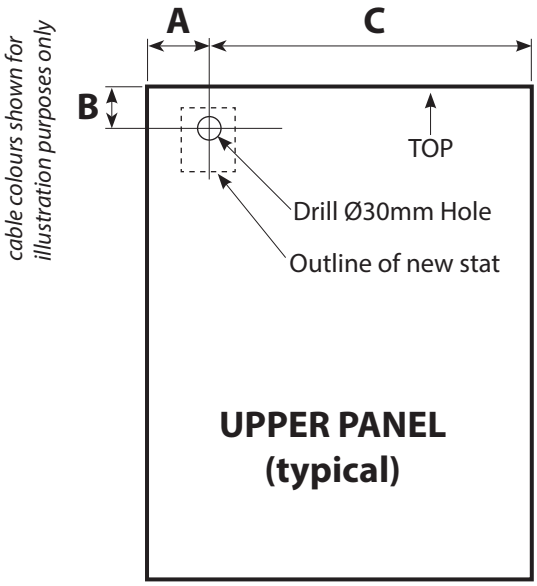
If replacing an obsolete Honeywell fan/limit stat, make a note of the actual wire colours used on the existing fan/limit stat in the sketch below.



Disconnect the four wires by pushing a screwdriver against each tab in turn and withdrawing each wire.

Remove the old fan/ limit stat by removing the fixing screws and fit the replacement.

If replacing an existing capilary style overheat & fan stat, a new 30mm hole must be drilled in the upper panel to the details in the following chart to accomodate the new stat.

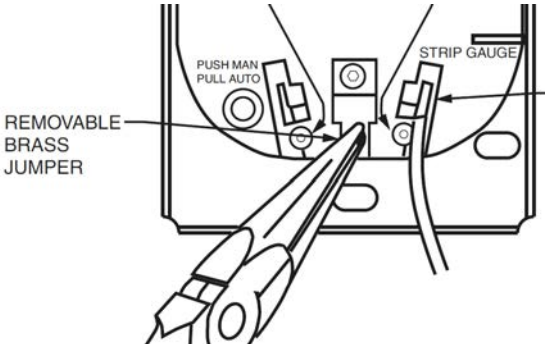


Heater model	Panel*	A	B	C
CA500/600/700	Front	**165**	**38**	**-**
CP800/1000/1250	Front	**61**	**38**	**-**
CA1000	LH Side	**-**	**85**	**1250**
CA1500	RH Side	**419**	**87**	**419**

** as viewed from burner*

Reconnect the wires in the original configuration by pushing a screwdriver against each tab in turn

Remove the brass jumper as shown below.

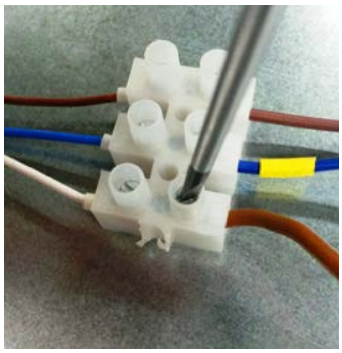


Trace the two limit wires through to the heater control panel and disconnect them at their respective terminals.

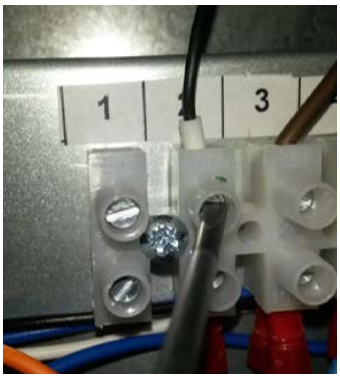
IMPORTANT: Place a link wire between the now empty terminals. **NOT FOR CP OR CPx CABINET HEATERS**

Join each one respectively to the new **BLUE** and **BROWN** wires of the 7-core cable using the 3 way terminal block. *(NB. these wires are not polarity sensitive.).*

Disconnect the heat demand cable from the control panel (taking note of its terminal number) and join to the new **WHITE** wire using the terminal block provided.



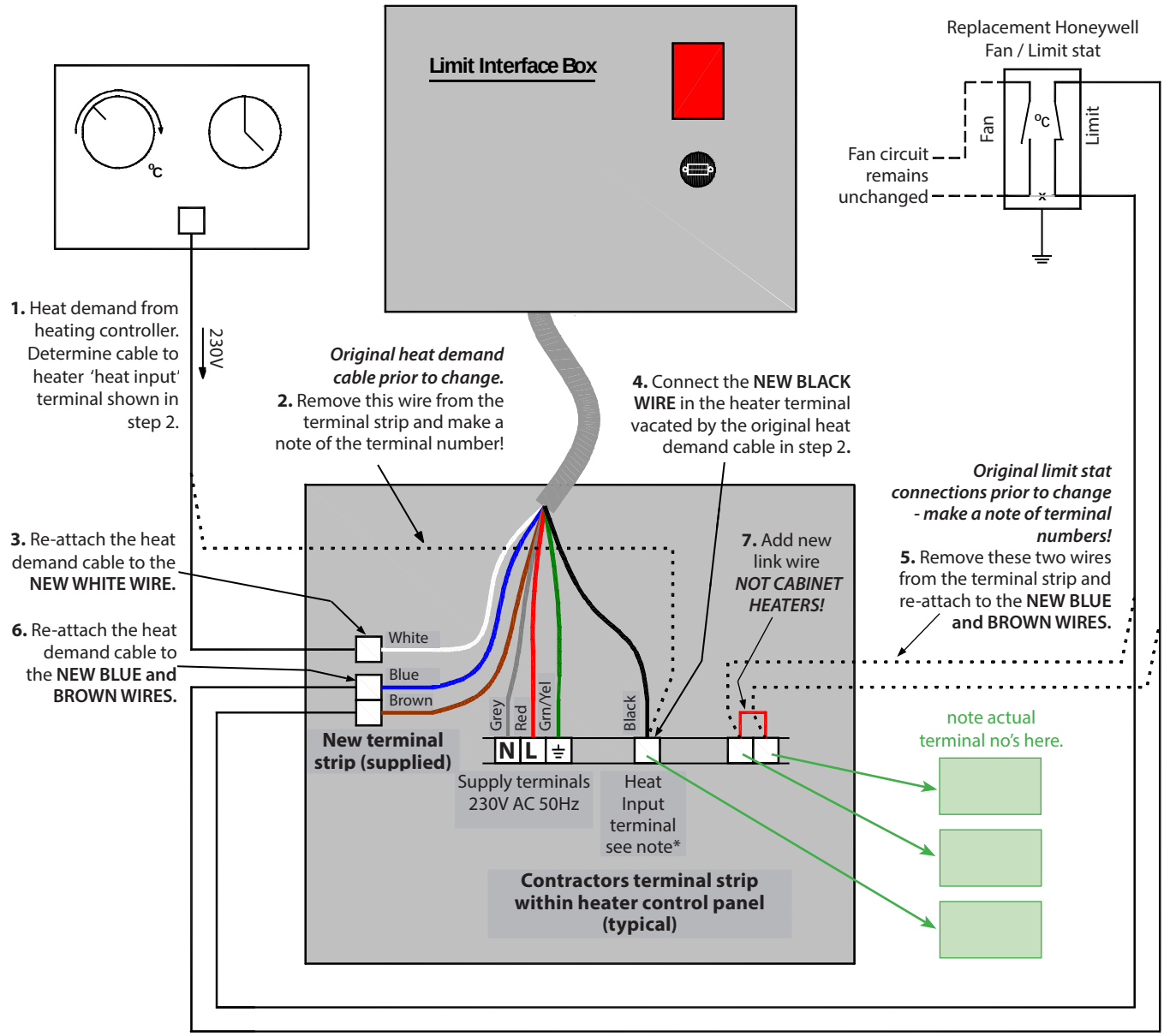
Connect the new **BLACK** wire from the seven core cable to the empty terminal identified from the step above. (terminal shown for illustration purposes only - see note overleaf)



Finally, connect the new **GREY** wire to a Neutral terminal, **RED** to permanent Live terminal and **GREEN/YELLOW** to the Earth terminal.

Schematic Diagram

For NVx, NVS, VPC, OUH, HEM & CP/CPx *(NOT COUNTERFLOW)*



Heater model	*Heat input terminal
NVx	**1**
NVS	**9**
OUH	**8**
VPC (after June 2012)	**1**
VPC (before June 2012)	**2**

Heater model	*Heat input terminal
CPx	**7**
CP (after October 2008)	**7**
CP (before October 2008)	**1**
HEM	**1**

section 2

IMPORTANT: This section must ONLY be used for Counterflow Direction CP and CPx cabinet heaters.

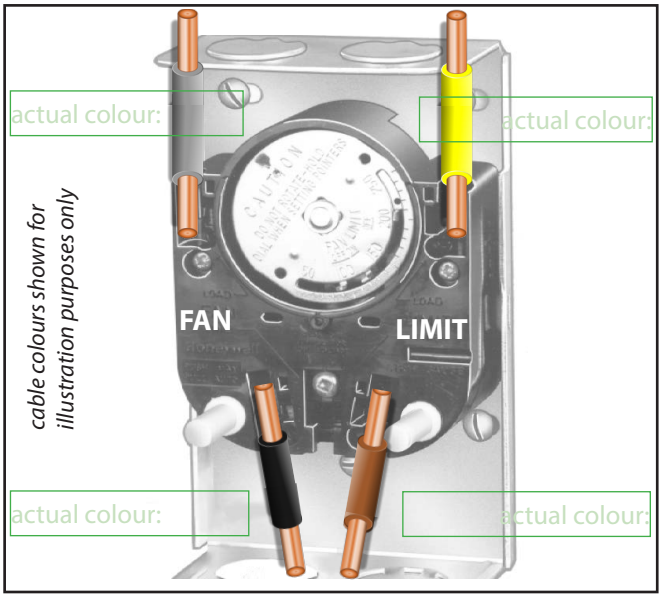
Position the Limit Interface Box on one of bottom panels close to the electrical panel and fix using self tapping screws provided.

Thread the seven core cable through the heater control box to the burner terminal strip. Cut off any excess cable and expose the 7 wire strands.

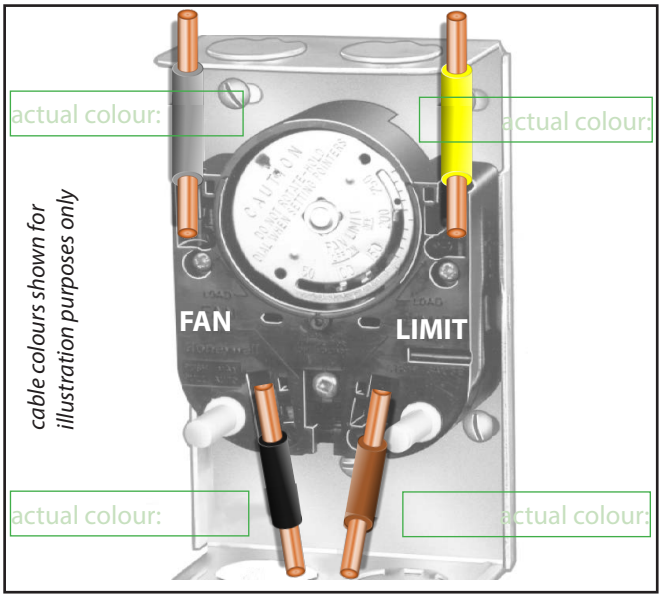
All stranded wires should be terminated using the crimp ferrules provided.

If replacing obsolete Honeywell fan/limit stats, make a note of the actual wire colours used on the existing fan/limit stat in the sketches below.

UPPER UNIT



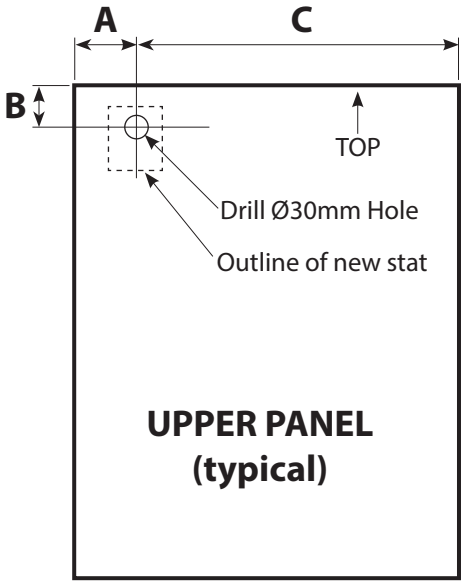
LOWER UNIT



Disconnect the four wires by pushing a screwdriver against each tab in turn and withdrawing each wire.

Remove the old fan/ limit stat by removing the fixing screws and fit the replacement.

If replacing an existing capilary style overheat & fan stat, a new 30mm hole must be drilled in the upper panel to the details in the following chart to accomodate the new stat.



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** as viewed from burner*

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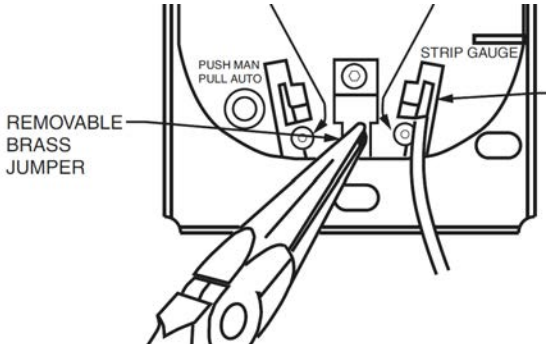
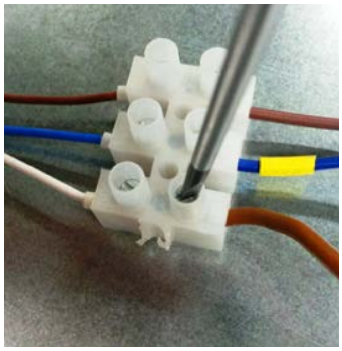
Remove the brass jumper as shown below.

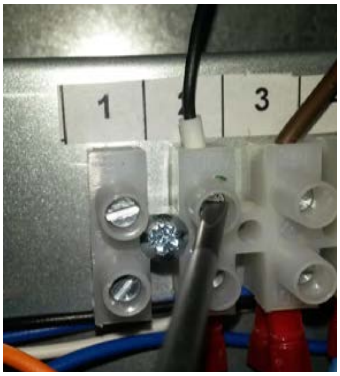


Trace the two limit wires through to the heater control panel and disconnect them at their respective terminals.

Join each one respectively to the new **BLUE** and **BROWN** wires of the 7-core cable using the 3 way terminal block.
(NB. these wires are not polarity sensitive.).



Disconnect the heat demand cable from the control panel (taking note of its terminal number) and join to the new **WHITE** wire using the terminal block provided.

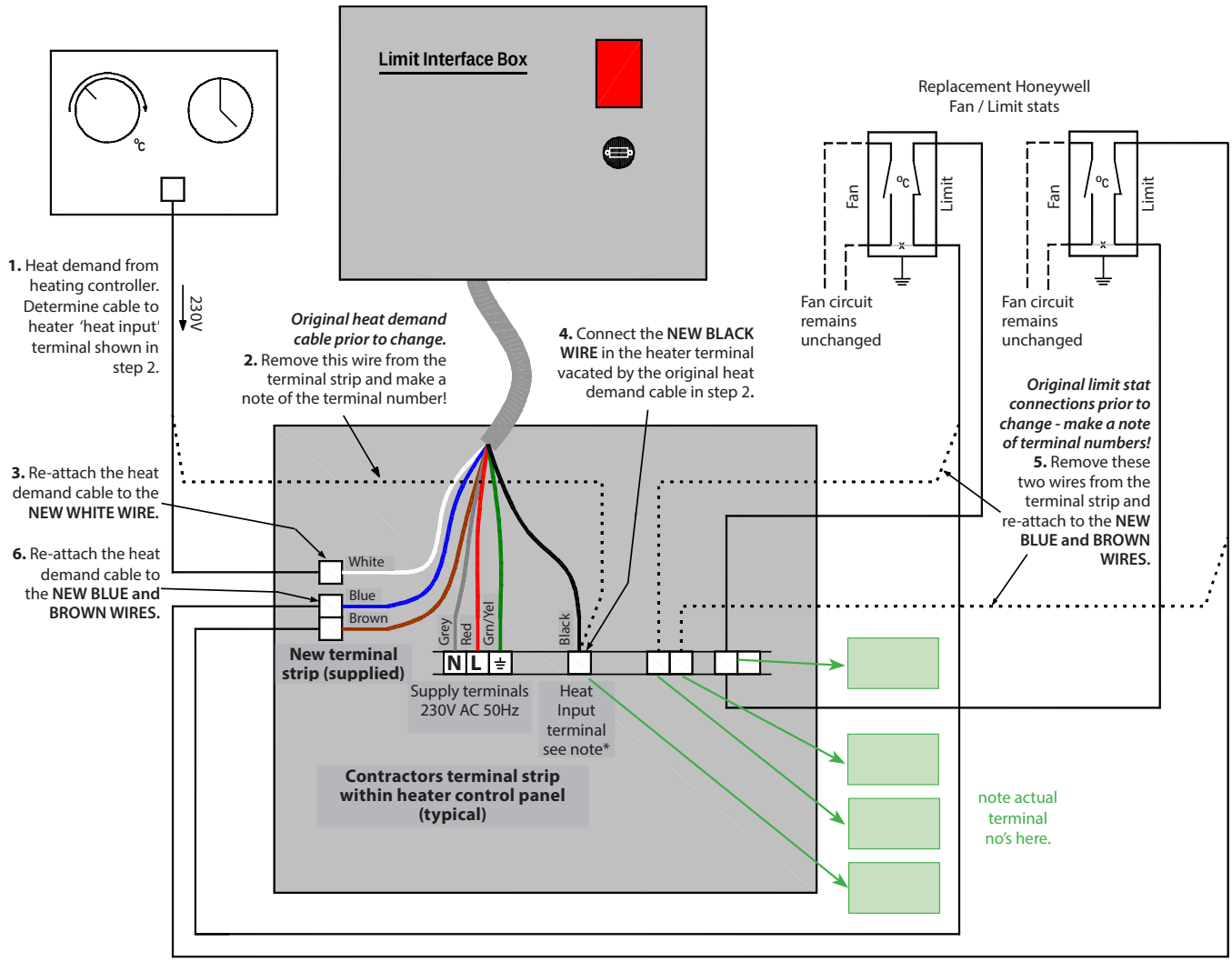


Connect the new **BLACK** wire from the seven core cable to the empty terminal identified from the step above. (terminal shown for illustration purposes only - see note overleaf)

Finally, connect the new
GREY wire to a Neutral terminal,
RED to permanent Live terminal and
GREEN/YELLOW to the Earth terminal.

Schematic Diagram

For COUNTERFLOW CP/CPx ONLY



Heater model	*Heat input terminal
CPx	**7**
CP (after October 2008)	**7**
CP (before October 2008)	**1**

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