

On-Site Repair Kit Guide for Warmup Mats and Loose Wire Systems

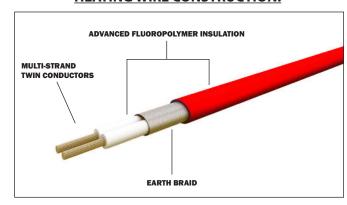
Warranty Disclaimer: This guide and the repair kit included have been provided by Warmup Inc to aid in the repair of a Warmup Loose Wire System (NADWS) or Heating Mat (NADWM) damaged on-site. Warmup cannot warranty the repair or guarantee the proper function of the heating system following a repair. Warmup recommends that all repair work be carried out by a qualified electrician in accordance with the National Electrical Code. For further assistance, please contact Warmup on 1-888-927-6333.

CAUTION: Before commencing with the repair, ensure that the heating system has been completely disconnected from the power source.

TOOLS & ITEMS REQUIRED FOR REPAIR:

- 1. One Joint Repair kit consisting of:
 - 2x Large heat shrink
 - 12x Small heat shrink
 - 12x Small butt crimp
 - 1x Length of bridge wire
- 2. Crimping Tool
- 3. Heat gun
- 4. Stanley knife / Wire strippers
- 5. Multi meter

HEATING WIRE CONSTRUCTION:



TESTING OF THE HEATER DURING & AFTER REPAIR

Do not tile if the heater does not pass all the tests. There may be a problem with new joint or additional wire breaks. Actual value should be $\pm 10\%$.

Contact Warmup at 1-888-927-6333 for further assistance.

Model NADWS-120V	Resistance
NADWS-140-120	102.9
NADWS-210-120	68.6
NADWS-280-120	51.4
NADWS-350-120	41.1
NADWS-420-120	34.3
NADWS-560-120	25.7
NADWS-700-120	20.6
NADWS-840-120	17.1
NADWS-1050-120	13.7
NADWS-1260-120	11.4
NADWS-1540-120	9.4
NADWS-1620-120	8.9

Model NADWS-240	Resistance
NADWS-350-240	164.6
NADWS-560-240	102.9
NADWS-700-240	82.3
NADWS-1050-240	54.9
NADWS-1260-240	45.7
NADWS-1540-240	37.4
NADWS-2100-240	27.4
NADWS-2520-240	22.9
NADWS-3080-240	18.7
NADWS-3240-240	17.8

Model NADWM-120V	Resistance
NADWM-140-120	102.8
NADWM-210-120	68.5
NADWM-280-120	51.4
NADWM-350-120	41.2
NADWM-420-120	34.3
NADWM-560-120	25.7
NADWM-700-120	20.6
NADWM-840-120	17.1
NADWM-1050-120	13.7
NADWM-1260-120	11.4
NADWM-1540-120	9.4
NADWM-1620-120	8.9

Model NADWM-240V	Resistance
NADWM-350-240	164.6
NADWM-560-240	102.9
NADWM-700-240	82.3
NADWM-1050-240	54.9
NADWM-1260-240	45.7
NADWM-1540-240	37.4
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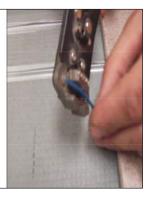
1

Use side cutters to remove any damaged heating wire.



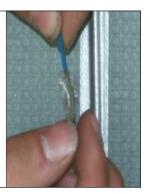
2

Use the wire strippers or Stanley knife to carefully remove approximately 50 mm of the outer sheath to expose the earth braid on both ends of the wire cut.



3

Unravel the earth braid on both ends of the wire.



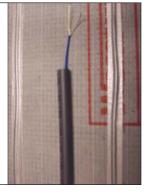
4

Twist the earth braid.



5

Slide one piece of the large black heat shrink over one end of the wire.



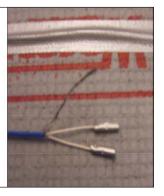
6

On both ends of the cut wire, use the wire strippers or Stanley knife to very carefully strip off approximately 7 mm of the insulation covering the both the heater cores. It is critical not to damage the heating wire core.



7

Attach a butt crimp to either end of the heater cores using a crimping tool.

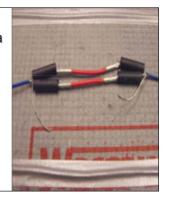


8

Slide one piece of the small heat shrink over each end of the heating elements up to the earth braid.

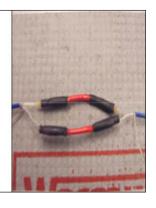


9 Cut a section of the "bridge" wire provided to a length suitable to replace the wire removed from the heating elements. Strip 10 mm from either end of this wire and fit these ends into the butt crimps located on the ends of the core wire and crimp using the crimping tool. Test the resistance of the heater



10

Slide the pieces of small heat shrink over the butt crimps so that any bare metal is covered. Shrink the heat shrink using a heat gun.







11

Attach a butt crimp to either end of the earth braid using a crimping tool.

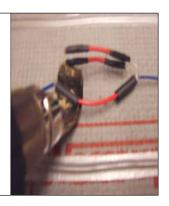


12 Slide one small piece of heat shrink over both sections of exposed earth braid. Cut a section of the "bridge" wire provided to a length suitable to replace the wire removed from the heating element. Strip 10 mm from either end of this wire into the butt crimps located on the ends of the earth braid and crimp using the crimping tool.



13

Slide the pieces of small heat shrink over the butt crimps so that the entire crimp is covered. Shrink the heat shrink using a heat gun.



Slide the large pieces of heat shrink over the small heat shrink and apply the heat gun.

Allow the new joints to cool, test resistance of the heater and then tile as normal.



