



# Micro-D Mod Code 497 EMI Ground Spring



## Improve EMI Performance with Mod Code 497 Ground Springs

Today's military and aerospace electronics systems require improved EMI protection. Micro-D connectors are widely used in EMI applications; however, the shell-to-shell resistance of a mated pair can vary, resulting in inconsistent levels of shielding effectiveness. Ground springs assure consistent shell-to-shell resistance for improved EMI protection.

**Ground Spring and EMI Shielding Effectiveness** – A gold-plated stainless steel ground spring on the pin connector mating face offers substantial improvement in EMI protection. The graphs compare identical connectors tested with and without ground springs.



EMI Performance with Ground Spring



EMI Performance without Ground Spring



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### How To Order Micro-D Connectors With Mod 497 Springs

**Step 1: Find a Standard Micro-D Part Number**  
Ground springs are available on all standard Micro-D plug connectors with solder cups, insulated wire, or printed circuit board. Ground spring usage is limited to pin connectors with electroless-nickel plated shells, or gold plated shells.

**Example: MWDM2L-100P-6K7-18B**  
1. Plugs only (pin connectors)  
2. Nickel and gold plated aluminum shells only

**Step 2: Add the Mod Code to the Part Number**

**Example: MWDM2L-100P-6K7-18B-497**

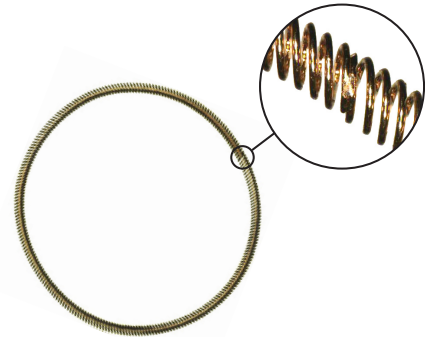
# Micro-D Mod Code 497 EMI Ground Spring Installation Procedure



## Step 1

Locate weld site on spring, indicated by a deformation in ring and a doubling of coils.

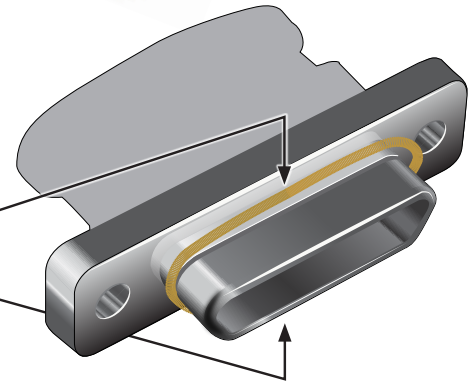
**Note:** When fitting spring to connector ensure that weld sits on the flat faces of the Micro-D™ connector as illustrated in Step 2.



## Step 2

Place spring into one end of groove on connector plug and stretch spring to sit in channel. Ensure that weld sits on flat face of plug. Complete fitting spring around channel while maintaining position of weld on flat faces of plug.

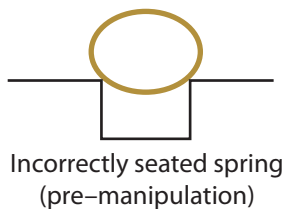
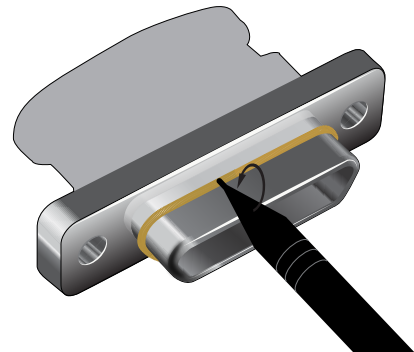
Weld position should be located on top or bottom flat face



## Step 3

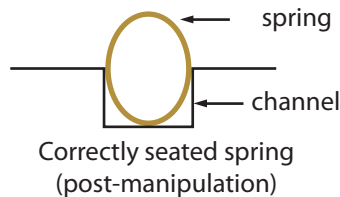
Ensure that the spring is properly seated in the channel by using a plastic mechanical pencil or similar item to rotate/manipulate the spring into position.

**Note:** Perform this manipulation carefully and incrementally. Do not simply slide the mechanical pencil/tool across the spring as this can unevenly distribute more of the spring into one area of the slot, resulting in deformation of spring material and lead to binding/crashing when mating connectors.



Profile View

Incorrectly seated spring (pre-manipulation)

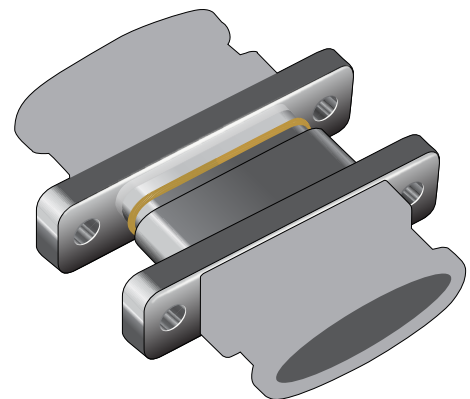


Correctly seated spring (post-manipulation)

## Step 4

Check for proper fitting and for binding points in mating process. Three mating cycles are recommended to ensure a proper fit.

**Note:** Weld on spring may appear discolored, this is normal.



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