



Tech note

FA Repeater Installation Guidelines to Maintain FCC Part 15 Compliance

Introduction

Inovonics FA repeaters must be installed properly to ensure FCC part 15 compliance. This tech note provides installation guidelines for FA repeaters.

Antenna Position

Ensure Antenna is Straight

Ensure the wire antenna is straight as shown in Figure 1.

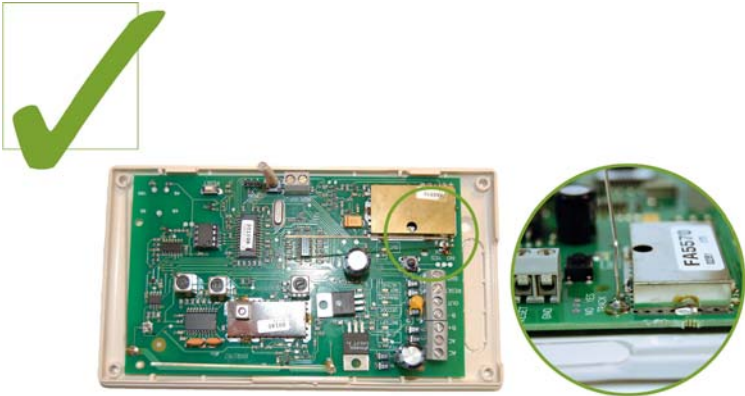


Figure 1 Straight FA repeater antenna.

The FA repeater will not function properly if the antenna is bent as shown in Figure 2.

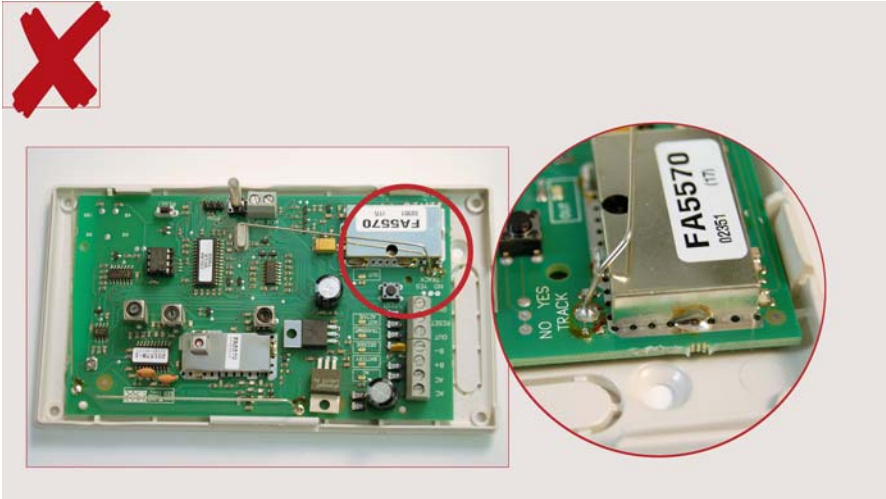


Figure 2 Bent FA repeater antenna

Ensure Antenna is Free of All Other Components

Ensure the wire antenna is free of all other components, as shown in Figure 3.



Figure 3 Unobstructed FA antenna.

The FA repeater will not function properly if the antenna is obstructed by other components as shown in Figure 4.

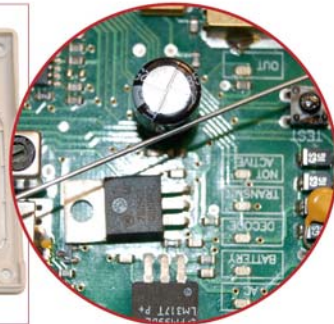


Figure 4 FA antenna obstructed by board component.

Ensure Antenna is Properly Angled

Ensure the antenna is angled vertically so that it touches the housing cover of the FA repeater when the housing cover is seated, as shown in Figure 5.

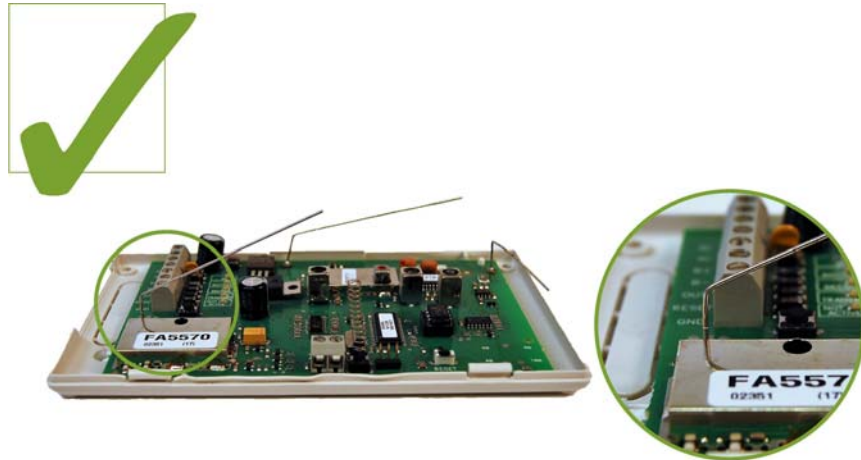


Figure 5 Properly angled FA antenna.

The FA repeater will not function properly if the antenna is flattened as shown in Figure 6.

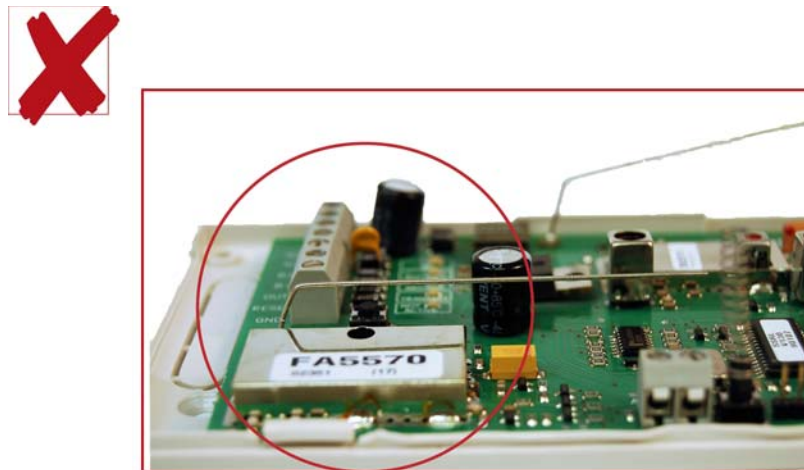


Figure 6 Flattened FA antenna.

Printed Circuit Board and Housing Cover

Ensure the board is seated on the alignment pin and the housing cover is properly attached, as shown in Figure 7.



Figure 7 Properly seated board and housing cover.

If the printed circuit board is not properly seated on the alignment pin, as shown in Figure 8, the housing cover will not close properly and the FA repeater will not function as designed.

Caution: The FA repeater will also not function properly without the housing cover.

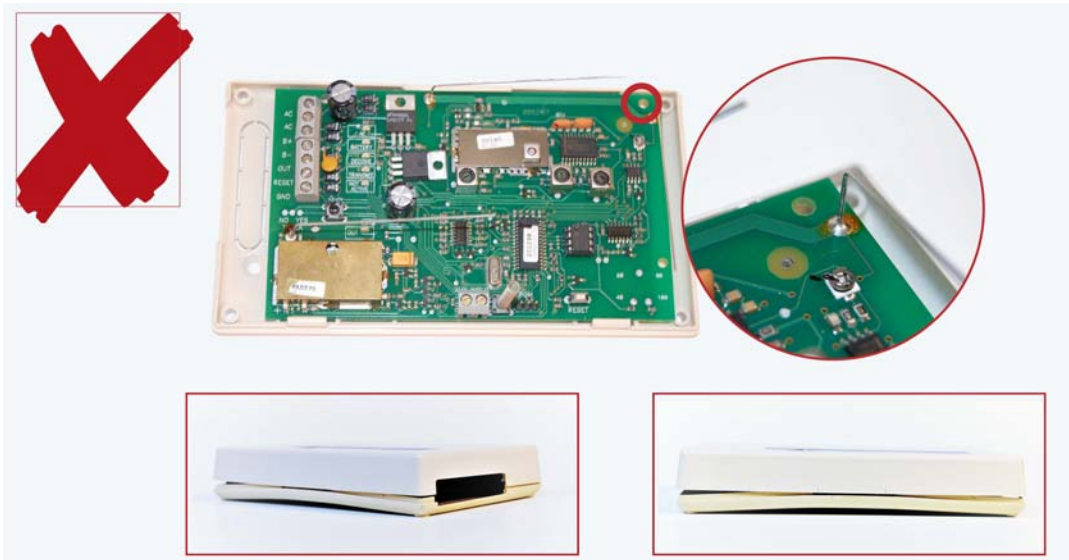


Figure 8 FA repeater with the board and housing cover unseated.