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RFI ELIMINATION FM-10S/FMi 703 & FM- 20S/FMi 1405 Application Guide

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RFI Elimination FM-10S/FMi 703, FM-20S/FMi 1405 Application Guide

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1 RFI Elimination, FM-10S/FMi 703 & FM-20S/FMi 1405

1.1 Overview of the installation of the RFI Elimination kit

The addition of this RFI Elimination kit will prevent RF interference from affecting the power supply control lines which can cause erroneous transmitter faults and foldback.

2 Overview

2.1 Overview / Estimated Completion Time

The installation of the RFI Elimination kit will take about 5 minutes. The kit consists of filter(s) that clamp around the control cable(s) and ground strap that clamps to the output RF conductor.

2.2 Items / Tools required for the Replacement Process

- No. 2 right angle Phillips Screwdriver
- Wire cutter
- Flat blade screw driver
- Kit 979-1010-002 for FM-10S/FMi703, or 979-1020-002 for FM-20S/FMi1405

3 Preparation

Prepare to install a filter clamp, two tie wraps, band-clamp and ground cable in the main cabinet. The FM-20S/FMi1405 will also require a filter clamp and two tie wraps in the auxiliary cabinet (included in the 979-1020-002 kit).

4 Install the RFI filter on control cables



WARNING: ENSURE ALL PRIMARY POWER IS TURNED OFF BEFORE PROCEEDING.

4.1 Power unit OFF.

4.2 Remove upper rear panel.



- 4.3** Locate the power supply cable in the PA cabinet (FM-10S/FMi 703 has one cable, the FM-20S/FMi1405 has two). The cable is marked P10 or P10C depending on transmitter model.

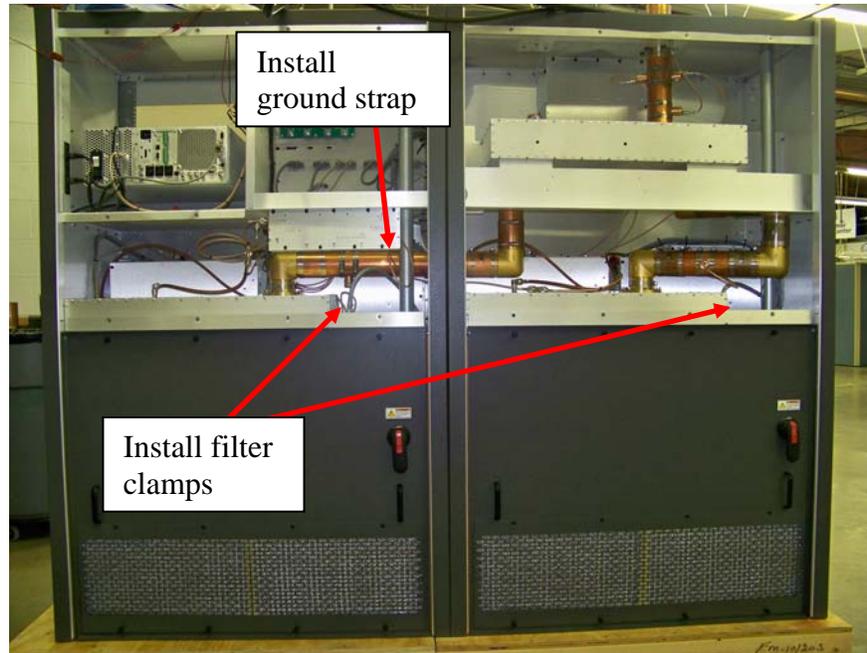


Figure 1. Over view of locations on an FM-20S/1405.

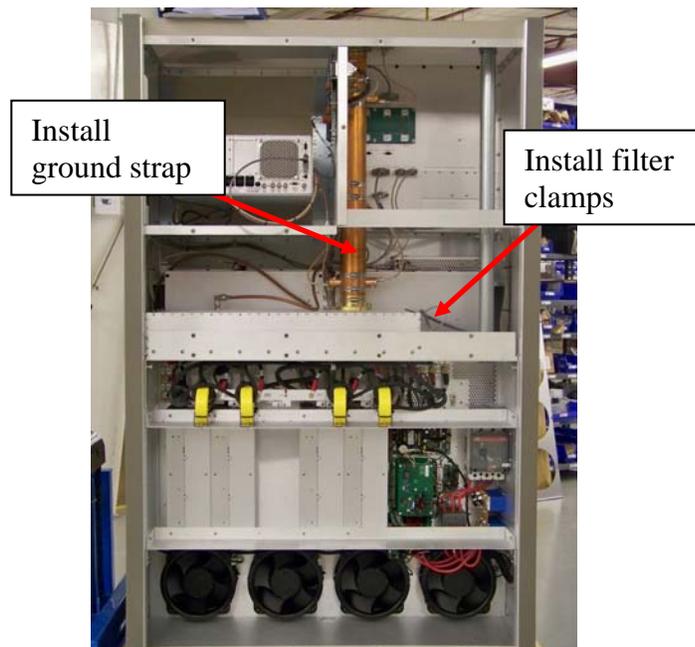


Figure 2. Overview of locations on an FM-10S/703.

- 4.4 Open the filter clamp 370-0176 and wrap it around the cable at P10 located next to the hybrid.
- 4.5 Secure the filter clamp with a tie wrap 402-0001 around the body of the filter. Also attach a tie wrap to the cable to prevent the filter from slipping.

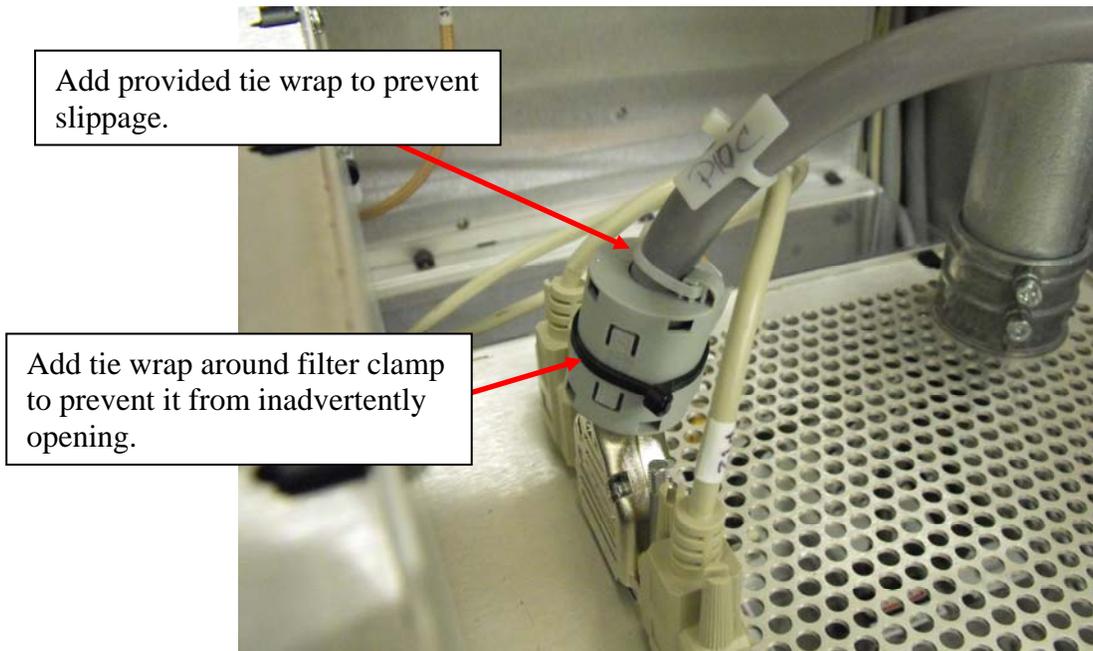


Figure 2. Filter clamp attached to control cable.

- 4.6 Repeat in the Auxiliary cabinet on the FM-20S/FMi1405.
- 4.7 Attached the supplied cable (949-0431 for a 10S/703 or 949-0431-001 for a 20S/1405) to a screw at the corner of the 8-way combiner using a right angle screw driver.

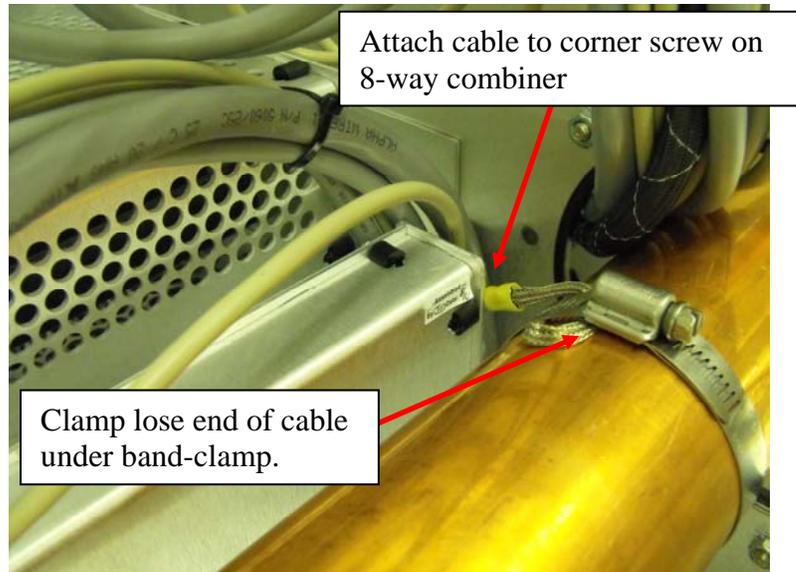


Figure 3. RFI Eliminator ground connection on FM-20S/1405.

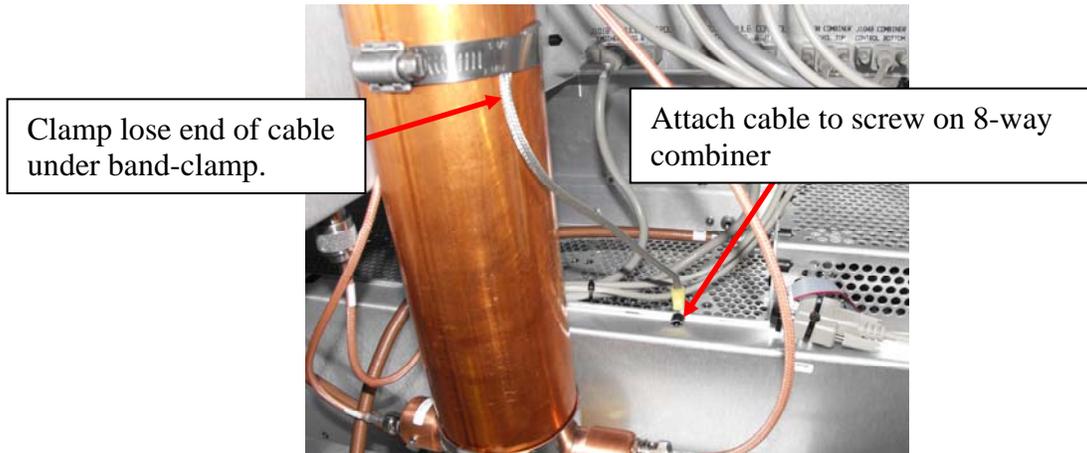


Figure 5. RFI Eliminator ground connection on FM-10S/703.

- 4.8** Open the band-clamp 402-0014 supplied and wrap it around the 3 1/8" cross-over pipe in the FM-20S/FMi1405 main cabinet. Clamp the lose end of the cable under the band-clamp and tighten. In the FM-10S/FMi703 clamp to the vertical output pipe in the same fashion.
- 4.9** Return the Transmitter to its previous operational state.

5 RF Technical Services Contact Information

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