



Service Bulletin #: SB 22

Title: Cirrus SIU Filter Kit

## **1. Planning Information**

### **1.1 Effectivity/Compatibility**

This Service Bulletin applies to all Avidyne Sensor Interface Units, part number 200-00031-000, installed in Cirrus aircraft that experience excessive comm interference noise.

The SIU is optional equipment on Cirrus Design SR20 and SR22 model aircraft with the engine monitoring option (Emax™).

### **1.2 Concurrent Requirements**

None

### **1.3 Reason**

In some configurations, the Sensor Interface Unit (SIU) has been shown to cause excessive interference in the VHF COMM band. The interference may be strong enough to break comm squelch on frequencies 132.7 and 121.65 MHz and may cause objectionable noise on those frequencies.

### **1.4 Description**

This Service Bulletin describes the installation of an EMI noise filter between each of the two SIU cable connectors and the SIU itself. The filters and the accompanying fastener hardware are contained in the Service Bulletin 22 Kit, Avidyne part number 850-00007-201.

### **1.5 Compliance**

This Service Bulletin is voluntary (optional), and should be accomplished if:

- radio frequency interference (RFI) is observed on 132.7 or 121.65 MHz
- the interference ceases when the engine instruments circuit breaker is pulled.

### **1.6 Approval**

The engineering data underlying the accomplishment instructions contained in Section 3 are FAA approved. No other portion of this service bulletin is FAA approved.

### **1.7 Time Required**

Installing the Cirrus SIU EMI filter kit should take one person approximately one hour.



---

**1.8 Weight and Balance**

Installation of the EMI filters produces a negligible change in the aircraft weight and balance.

**1.9 Electrical Load Data**

No change.

**1.10 Software Accomplishment**

None.

**1.11 Reference**

Cirrus Design Maintenance Manual Number 12137-001 (SR20) and 13773-001 (SR22), Section 77-30.

**1.12 Publications affected**

None.



---

## **2. Material – Cost and Availability**

Cost: No charge for the SB22 kit. Avidyne will reimburse 1 hour of labor .

Availability: The SB22 kit is available from either Avidyne or Cirrus.

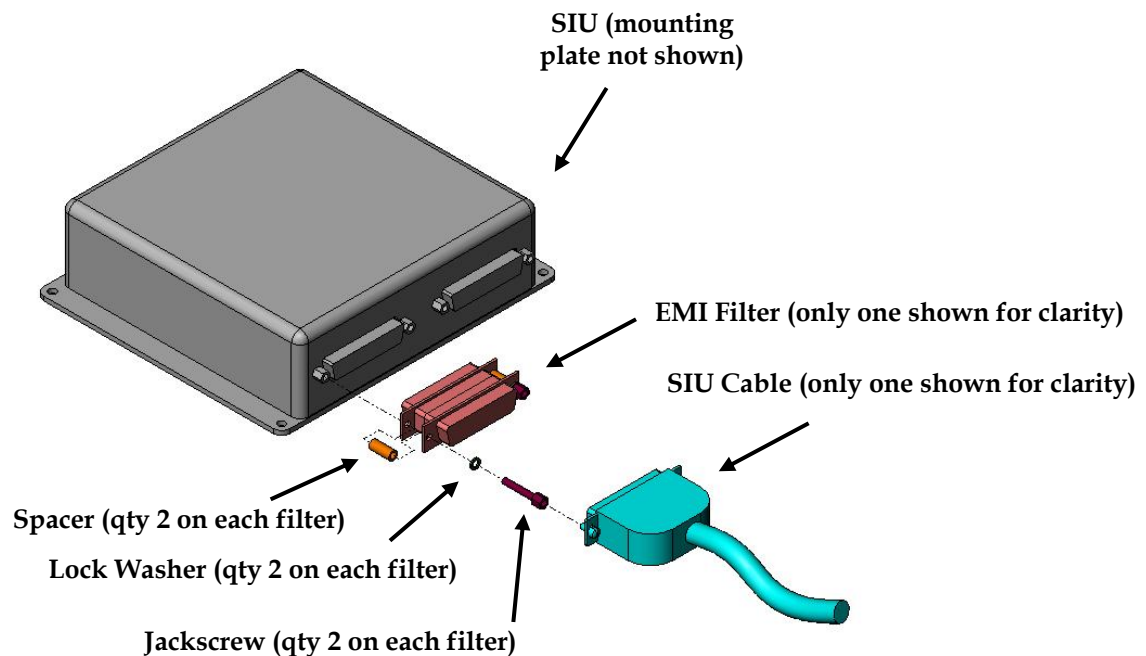
## 3. Accomplishment Instructions

### 3.1 Required Materials

1. \_\_\_\_\_ Service Bulletin 22 Kit, Avidyne part number 850-00007-201
2. \_\_\_\_\_ 3/16" nut driver, small flat-bladed screwdriver
3. \_\_\_\_\_ Cirrus Design Maintenance Manual Number 12137-001 (SR20) or 13773-001 (SR22)

### 3.2 Installing the EMI Filters

1. \_\_\_\_\_ Drop the aluminum plate which holds the SIU. This is located under the copilot instrument panel. Refer to Cirrus Design Maintenance Manual Number 12137-001 (SR20) or 13773-001 (SR22) for exact location of the plate, if needed.
2. \_\_\_\_\_ Unscrew and remove the two cables attached to the SIU.
3. \_\_\_\_\_ Install a filter onto each connector on the SIU. Make sure to insert a spacer between the filter flanges on each side, and secure each filter with two jackscrews and lockwashers. Refer to the figure below:





## SERVICE BULLETIN

4. \_\_\_\_\_ Reconnect the two SIU cable connectors to the filters which are now mounted on the SIU, making certain to match the cables to the same ports to which they were originally connected.
  
5. \_\_\_\_\_ Reinstall the SIU mounting plate and make the appropriate entries in the aircraft maintenance log.



## **4. Post-Installation Checkout**

To confirm proper operation after accomplishment of this Service Bulletin:

1. \_\_\_\_ Power on the EX5000
2. \_\_\_\_ Ensure that the message "SIU NOT COMMUNICATING" does not appear.
3. \_\_\_\_ Follow normal procedures to prepare for engine start, and start aircraft engine.
4. \_\_\_\_ Turn the EX5000 display select knob to display "Engine"
5. \_\_\_\_ Confirm normal indication of all engine parameters.
6. \_\_\_\_ Select Speaker on the Audio Panel for both VHF Com Radios. Tune each radio to both 132.7 and 121.65 MHz while monitoring to determine that the squelch does not break on either radio on either frequency