



## AM-1A, AM-2.5E, AM-5E, AM-6A, AM-10A and AM-500A AM Transmitter Series Exciter / Controller C90 Replacement Application Guide

# **AM-1A, AM-2.5E, AM-5E, AM-6A, AM-10A and AM-500A AM Transmitter Series**

## **Exciter / Controller C90 Replacement Application Guide**

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# 1 Prepare to Replace C90 on the Exciter / Controller

## 1.1 Overview

**Problem:** The C90 value change is necessary to prevent a premature ECU exciter fault with negative modulation peaks while operating in the IBOC mode.

**Affected Units:** Any AM-500A, AM-1A, AM-2.5E, AM-5E, AM-6A, or AM-10A transmitter shipped prior to June 5, 2006 that is or will be operating in the IBOC mode. Units that have been in for service since this date have already been retrofitted.

**Fix:** Broadcast Electronics, Inc. has made a C90 replacement cap (Part Number 003-1066) available free of charge. Please contact the RF Customer service department 217/224-9617.

## 1.2 Tools / Items Needed

- ☐ 700°F Soldering Iron with 1/10" Pencil Tip
- ☐ SN 63PB37 Solder or Equivalent
- ☐ General Soldering Tools
- ☐ 0.1uF Cap (Part Number 003-1066 supplied by B.E.)

## 1.3 Estimated Time for Replacement

Providing that you have the tools listed above, it will take approximately 10-15 minutes to replace C90 on the Exciter / Controller.

## 1.4 ESD Awareness



When handling the Exciter / Controller PCB, be sure to exercise ESD precautions as the Exciter / Controller has ESD sensitive components.

## 2 Replacing C90 on the AM Transmitter's Exciter / Controller

### 2.1 Turn the AC Breaker OFF

Turn the AC  
Breaker to the  
**OFF** position



Figure 1 – Turn the AC Breaker to OFF

### 2.2 Open the AM Transmitter's Exciter / Control Access Door



Figure 2 – AM Transmitter Exciter / Control Access Door





### 2.3 Remove the Exciter / Control Board



Figure 3 – Remove the Exciter / Control Board

### 2.4 Locate C90 on the Exciter / Controller Board

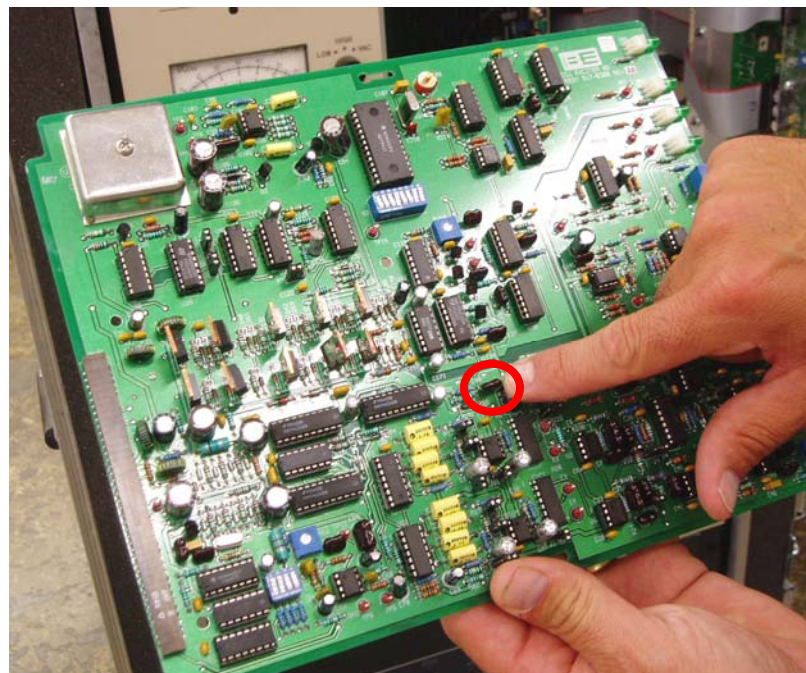


Figure 4 – C90 Location

## 2.5 Replace C90 the Exciter / Control Board

Replace C90 with  
the 0.1uF Capacitor  
supplied by B.E.

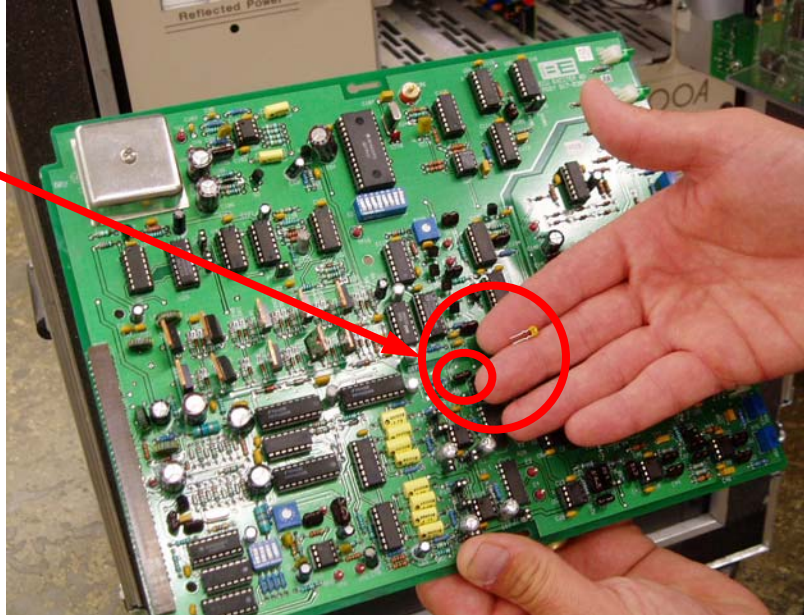


Figure 5 – Replace C90 with 0.1uF Cap Supplied By B.E.

## 2.6 Install the Exciter / Control Board



Figure 6 – Install the Exciter / Control Board



## 2.7 Close the AM Transmitter's Exciter / Control Access Door



Figure 7 – Close the AM Transmitter's Exciter / Control Access Door

## 2.8 Turn the AM Transmitter's AC Breaker ON

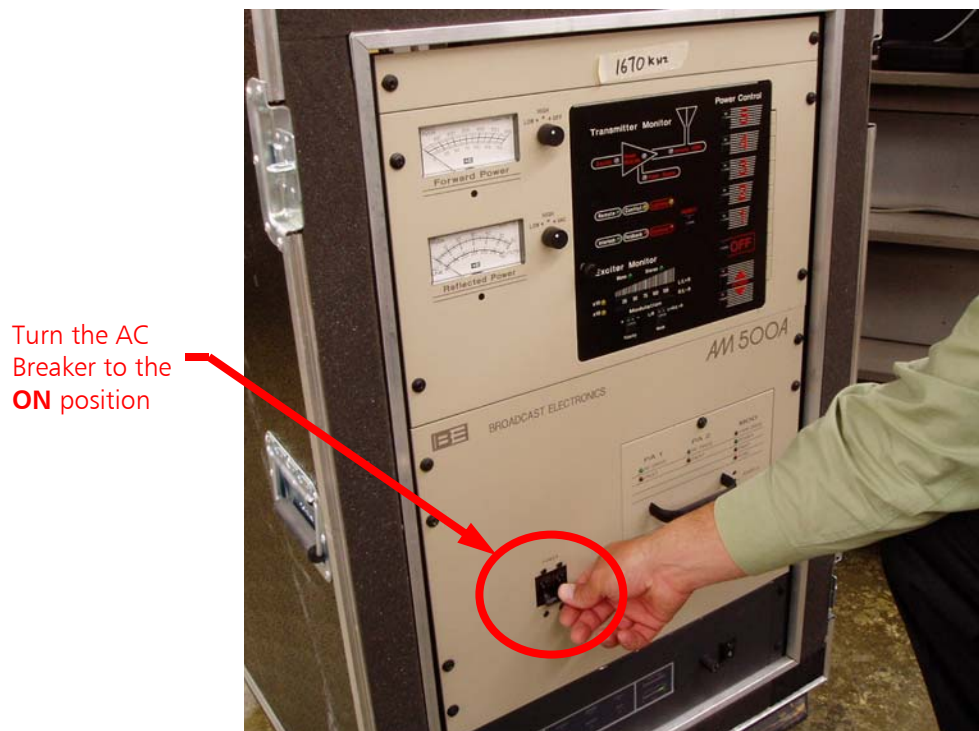


Figure 8 – Turn the AM Transmitter's AC Breaker ON