

# Technical Service Note

Detection Systems, Inc., 130 Perinton Parkway  
Fairport, New York, USA 14450-9199  
(585) 223-4060 • (800) 289-0096 • Fax (585) 223-9180

**Concerns:** R13-EA500B-PKG ROM Kit

**Affects:** EA500B Transponder

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## 1.0 Introduction

The ROM Chip shipped in the EA500B Transponder is Version 4.xx and is compatible only with receivers and transmitters that operate at a radio frequency of 304.00 MHz. In order for the Transponder to be compatible with older systems, which run on a radio frequency of 303.825 MHz, the Chip in the Transponder must be exchanged with this ROM Chip.

| ROM Chip Version | Compatible RF |
|------------------|---------------|
| 4.xx             | 304.00 MHz    |
| 3.xx             | 303.825 MHz   |

**NOTE:** If you are not sure what radio frequency your system is using consult the specifications in the Receiver Installation Instructions.

## 2.0 Removing the ROM Chip from the EA500B

### 2.1 Power Down the Transponder

Turn the power switch off and ensure that the Transponder is not connected to AC or battery power.

### 2.2 Remove the Shield

Using a flat-head screwdriver, remove the screw that holds the stainless steel shield on the Transponder's circuit board. Remove the shield. The chip to be removed is below the shield toward the top of the board (see Figure 1).

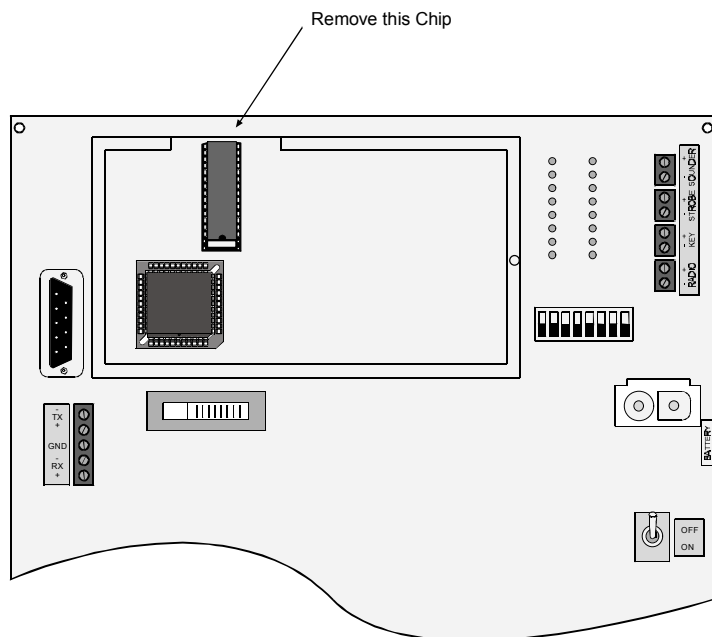


Figure 1: Location of ROM Chip

## 2.3 Remove the ROM Chip

Insert a flat-head screwdriver between the chip and the dip socket (see Figure 2). Slowly pry the chip away from the dip socket.

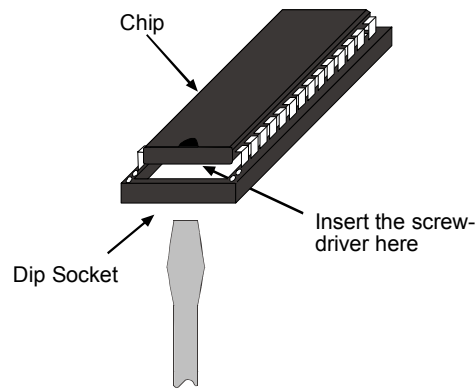


Figure 2: Removing the ROM Chip

## 3.0 Installing the Update Chip



Prior to handling the chip, ensure that you are properly grounded and that static electricity has been minimized or eliminated.

The chip may be shipped with the connector pins opened wider than the holes in the dip socket. If so, the pins should be bent inward slightly before the chip is inserted into the dip socket (lay the chip on its side and roll it slightly to bend the pins inward).

You will notice that there are two more holes in each side of the dip socket than there are pins on the ROM Chip. When inserting the new chip make sure that it occupies all but the bottom two holes on each side. Place the new chip over the dip socket, ensuring that the notch on the chip is pointing down the board (toward the bus connectors) (see Figure 3). Carefully examine each pin to determine that it is directly over its intended hole. Once this has been determined, slowly push down on the chip making sure that none of the pins bend.

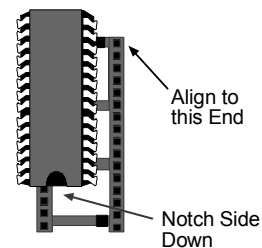


Figure 3: Inserting the New Chip

## 4.0 Finishing the Installation

Replace the shield covering the ROM Chip. Install the Transponder as instructed by the Transponder Installation Instructions and power up the unit.

Thoroughly test the EA500B Transponder to ensure the compatibility of the ROM Kit with the rest of the system. Testing should include transmitter tests and a review of the results at the central station.

