

## RECEIVER SHUTDOWN PROBLEM D-SERIES BASE RADIOS

**Models affected:** JBS-146D, JBS-446D, PBS-146D, PBS-446D

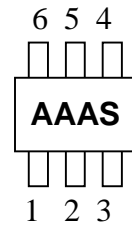
**Symptoms:** Poor receiver sensitivity, range less than 100 feet when transmitting to the base.

**Problem:** A small number of D-Series base radios shipped between June-August 2003 suffer a problem with receiver shutdown. The base radio receiver may work correctly when the unit is first turned on, but will be severely de-sensed after the base has transmitted. This is because the SHUTDOWN input to 1<sup>st</sup> mixer U102, pin 6 was left unterminated. Most units work under this condition, but a small percentage have exhibited the symptoms described above.

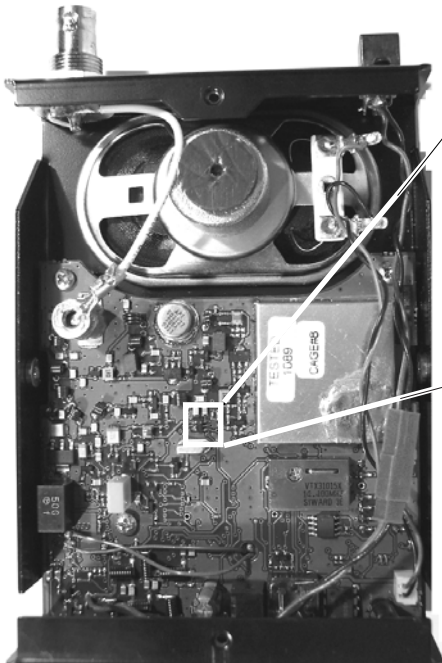
**Solution:** Connect the pin 6 SHUTDOWN input of 1<sup>st</sup> mixer U102 to the receiver +5 VDC supply line. This is easily accomplished by shorting pins 5 and 6 of U102 together. The repair can be easily performed by an authorized RITRON service technician, or returned to RITRON directly for warranty service repair.

**Repair:**

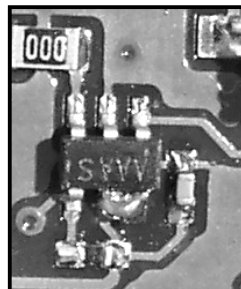
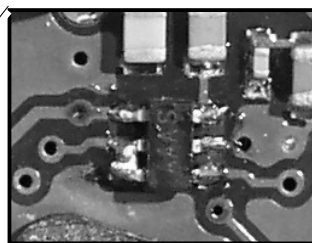
1. Remove power from the radio.
2. Remove the case bottom by removing the 4 screws on the case bottom and sides.
3. Locate U102 per the photos below. U102 is marked "AAAS" on top.
4. With a small tip soldering iron, create a solder bridge between pins 5 and 6 of U102 as shown in the photo below.
5. Re-attach the case bottom with the 4 screws. The 2 larger screws are used on the case sides.



**U102 marking**



**JBS-146D and PBS-146D  
with pins 5 and 6 of U102 shorted**



**JBS-446D and PBS-446D  
with pins 5 and 6 of U102 shorted**