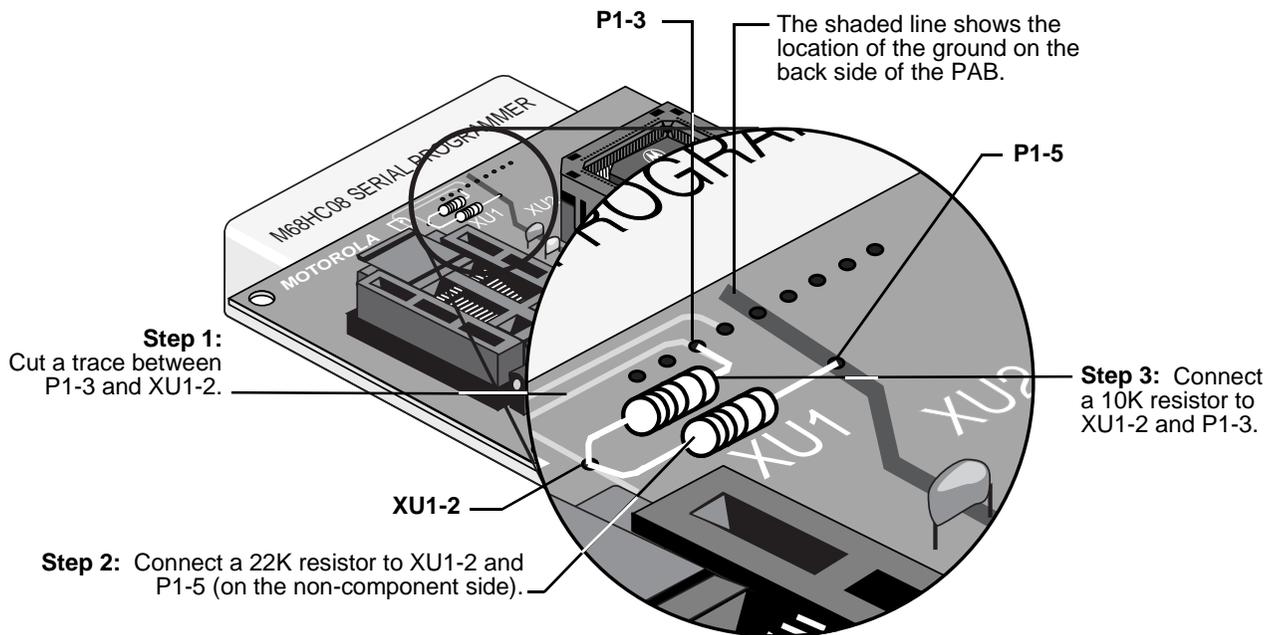


Modifying the AX48 Programming Adapter Board

You can use the SPGMR08 to program AS60 and AZ60 MCUs with the M68PA08AX48FNFU (AX48) programming adapter board (PAB), if the PAB has the necessary modifications. The AX48 PAB must have resistors connecting P1-3 and P1-5 to XU1-2, as shown in the illustration below. If you have an AX48 PAB without these resistors, you can make the modifications yourself. Note that user-performed modifications to a programming adapter board invalidate any board warranty still in force. If your AX48 PAB is under warranty, and you want to have it modified for use with AS60 and AZ60 MCUs, contact your Motorola representative.

Caution: You can damage AS60 and AZ60 MCUs if you attempt to program them on an AX48 programming adapter board that does not have the modifications described here.



To modify the AX48 PAB:

- 1 Cut a (VPP) trace between **P1-3** and **XU1-2**. (Position the trace to allow room for placement of the resistors.)
- 2 Scrape solder mask from the cut trace that goes to **XU1-2**, to allow soldering.
- 3 Connect a 22K resistor from **XU1-2** (scraped trace) to **P1-5** (GND). (Insert the resistor wire through to the noncomponent side of the PAB, and connect it to the ground at P1-5.)
- 4 On the component side of the programming adapter board, connect a 10K resistor from **XU1-2** (scraped trace) to (VPP) **P1-3**.