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### Circuit Board Modification – Encoder Filter

**Overview:** Spurious glitches output by the Bourns encoder (08-03-0270) require additional filters to be added. Affected encoders have a date code of 2144, 2226 and later.

**Components:** 8 x Capacitor – 10nF 06-03-0200 (603)  
 8 x Resistor – 10k 06-01-2325 (603)

<p><b>Product(s):</b></p>	<p><b>Arena</b> ASB 1201-7350DA-FB</p>
<p><b>Existing Circuit:</b></p>	<p>The diagram shows four encoder channels, EN1 through EN4, each using an ENC-EM14 encoder. Each channel has a VCC supply and a ground connection. Channel EN1 has a 10nF capacitor (R38) and a 10k resistor (R39) at the output. Channel EN2 has a 10nF capacitor (R42) and a 10k resistor (R43) at the output. Channel EN3 has a 10nF capacitor (R47) and a 10k resistor (R48) at the output. Channel EN4 has a 10nF capacitor (R63) and a 10k resistor (R64) at the output. The diagram also shows the internal connections of the encoders and the placement of various components like resistors (R36, R37, R40, R41, R45, R46, R49, R62), capacitors (C3, C4, C5, C6, C7, C8, C10, C11, C12, C13, C14, C15), and optoisolators (C4, C5, C7, C8, C11, C12, C14, C15).</p>
<p><b>Circuit Replacement Location:</b></p>	<p><b>Encoder A:</b>        10nF Capacitor replacement at location R38.        Add 10nF Capacitor to location R39.        Fit 10k Resistor at location C5, C5.</p> <p><b>Encoder B:</b>        10nF Capacitor replacement at location R42.        Add 10nF Capacitor to location R43.        10k Resistor replacement at location C7 and C8.</p> <p><b>Encoder C:</b>        10nF Capacitor replacement at location R47.</p>

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	<p>Add 10nF Capacitor to location R48. 10k Resistor replacement at location C11 and C12. <b>Encoder D:</b> 10nF Capacitor replacement at location R63. Add 10nF Capacitor to location R64. 10k Resistor replacement at location C14 and C15.</p>
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