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Technical Bulletin

Background

MC206X production began at the end of 2005. In the summer of 2006 an issue came to light which affects the 5 digital inputs that also provide the registration trigger inputs for axes 0 to 4. This document describes which MC206X *Motion Coordinators* are affected and the recommended solution.

Products Affected

MC206X *Motion Coordinators* with serial numbers **P136-00001** to **P136-00700**.

If the application uses position registration and uses the **REGIST (3)** or **REGIST (4)** command in Trio BASIC, then this bulletin should be acted upon.

The operation of digital inputs 0 to 4 is normal when they are used with the **IN (0)** to **IN (4)** command in Trio BASIC. In this case, **no further action is required**.

All other *Motion Coordinator* products are not affected.

Symptoms of registration error

When **REGIST (3)** or **REGIST (4)** is used, the intended operation is that the **MARK** flag will go **TRUE** only after the rising edge or falling edge has occurred on the input, as appropriate. The opto-isolated input circuit in the above serial number range causes the **MARK** to sometimes go **TRUE** on both registration edges, rising and falling. This can lead to significant registration position errors on some applications.

Remedial Action

It is possible that the error can be masked by applying a suitable filter algorithm in Trio BASIC. However it may be preferred that the MC206X is returned to Trio for modification. Due to the components involved, it is not possible for this modification to be made in the field.

If the MC206 is returned to Trio for this work to be done, there will be no charge for components or labour up to 5 years after the original shipment date of the controller from Trio. Beyond 5 years the work will be treated as a normal repair and the standard repair charge applied. Other than this “extended warranty”, Trio’s normal repair terms and conditions will apply to any MC206Xs returned for this work to be done.