

# Move SR Datum Sensor to Higher Level R0019217

Moving the SR axis datum sensor to a higher level to prevent damage and improve reliability Autoflow Mk4 only

 Difficulty **Hard**

 Duration **2 hour(s)**

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Comments


## Introduction

On a Mk4 Autoflow, The SR axis datum sensor is originally located at the rear and to the base of the SR axis. This area is prone to offcuts, so a new location has been designed at the top, with the following design parameters

- Easy to retrofit
- Sensor is protected in a case
- Short distance to connection box
- Uses existing mounting holes
- Easy to adjust and maintain
- Sensing end location should be vertical onto a plate, not horizontal on to a radiused surface
- Can use E0000336 2mm range sensor reliably
- Incorporate a front fence to help deflect offcuts down the chute and to protect the sensor

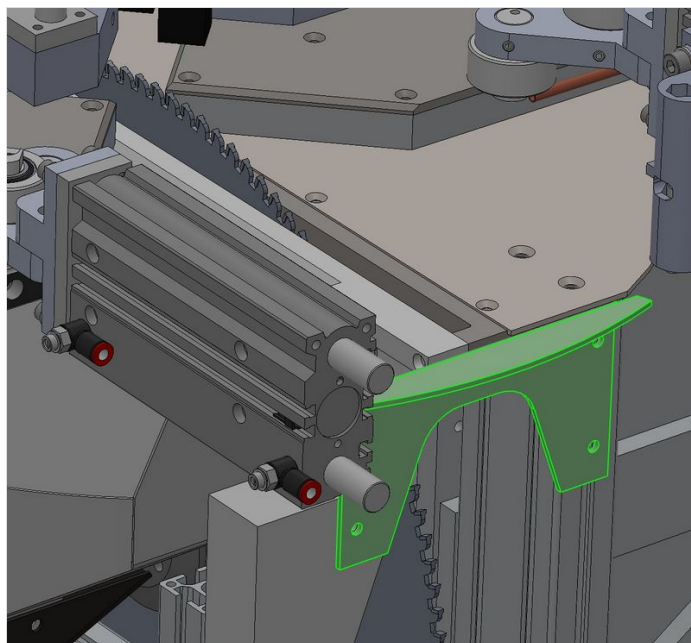
The parts are supplied in Kit R0019217B

 ...In November 23, a second iteration of the design was released using metal parts and a side fence to improve robustness (R0019217B)

 ...The pictures and models illustrated here are from a Right to Left feed machine. Parts are unhandled so can be fitted to either hand machine

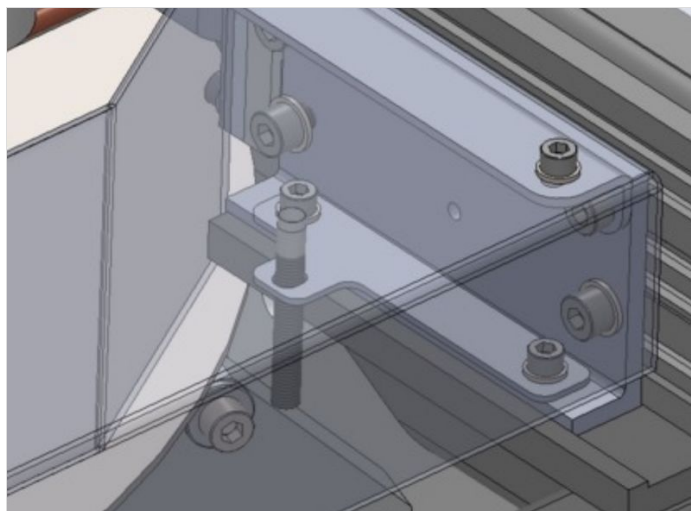
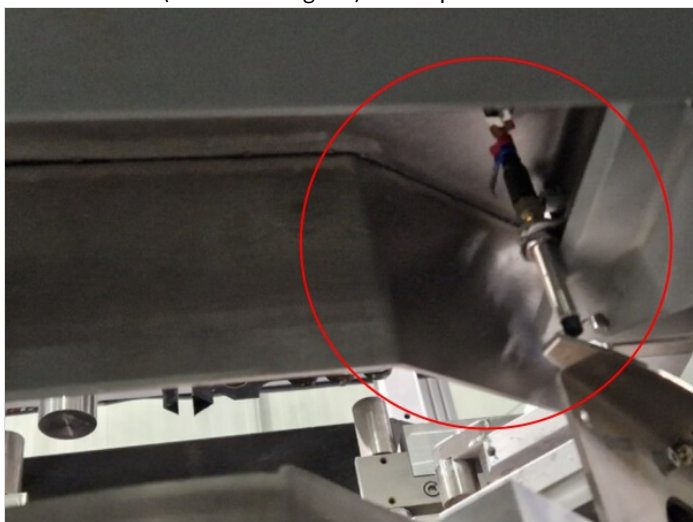
## Step 1 - Fit Replacement SR Detection bracket

Replace the upper brace plate with D0016338. This has the detection plate for the SR axis added on the top



## Step 2 - Assemble Sensor Cable and Holder

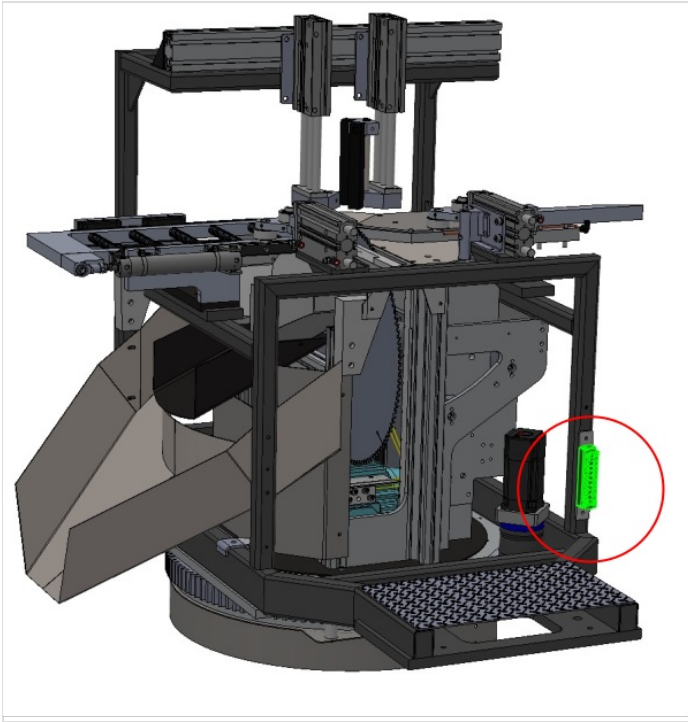
1. Assemble the cable using E0001046 cable plus E0001069
2. Add E0000336, and assemble in to D0016348 Autoflow SR Sensor holder
3. The sensor (with fastening nut) should protrude 5mm from base of holder



## Step 3 - Fit wire

Sensor Cable X126 replaces the original cable in top channel  
(see pic)

Tidy the cable into a loop and cable tie along length to saw frame upright strut



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## Step 4 - Adjust Datum sensor height

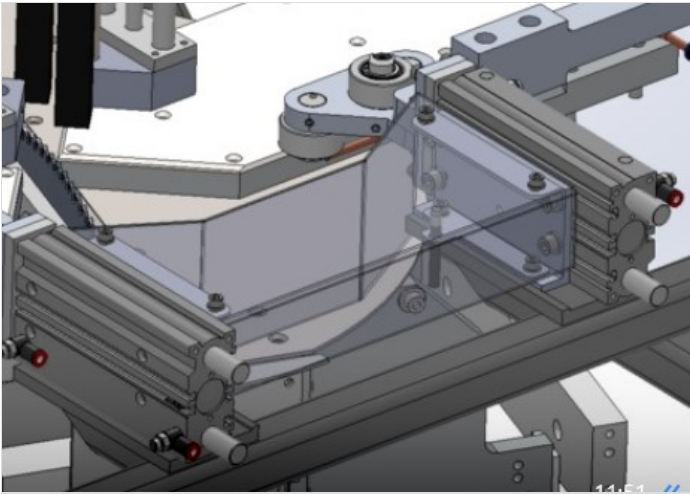
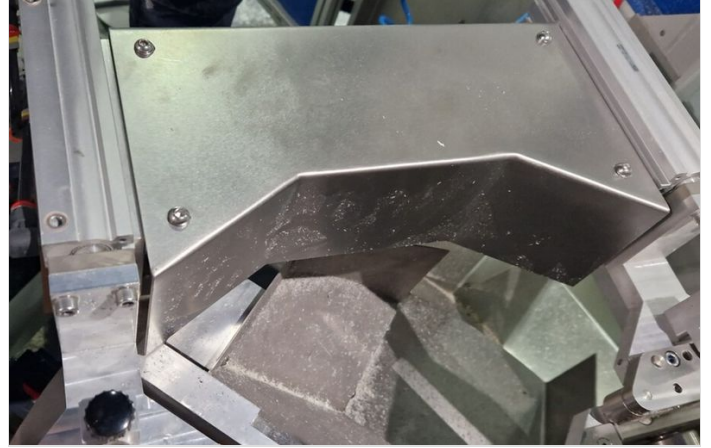
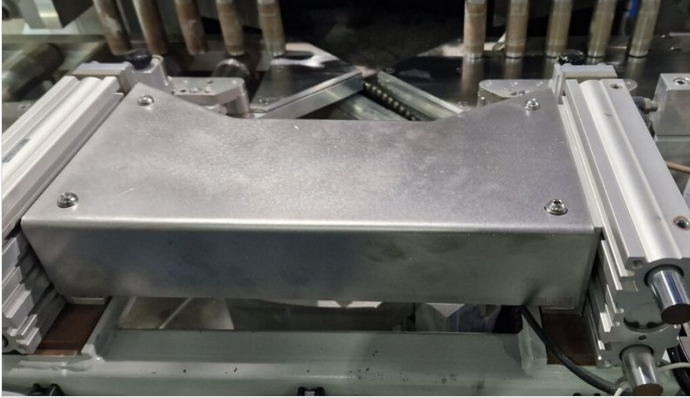
Adjust the height of the sensor so it is 0.5-1mm clear of SR Detection Bracket  
Check the sensor switches on and off with rotation of SR axis  
Check the input flashes on and off the EtherCAT box

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## Step 5 - Add the top guard and brackets

Brackets: 2 off D0016350

Guard: 1 off D0016349



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## Step 6 - Reset Datum

Changing the datum sensor location will mean that the SR datum position will need to be reset

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