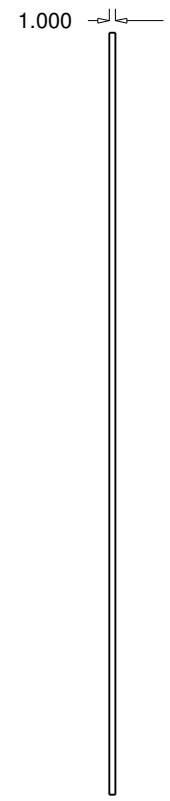
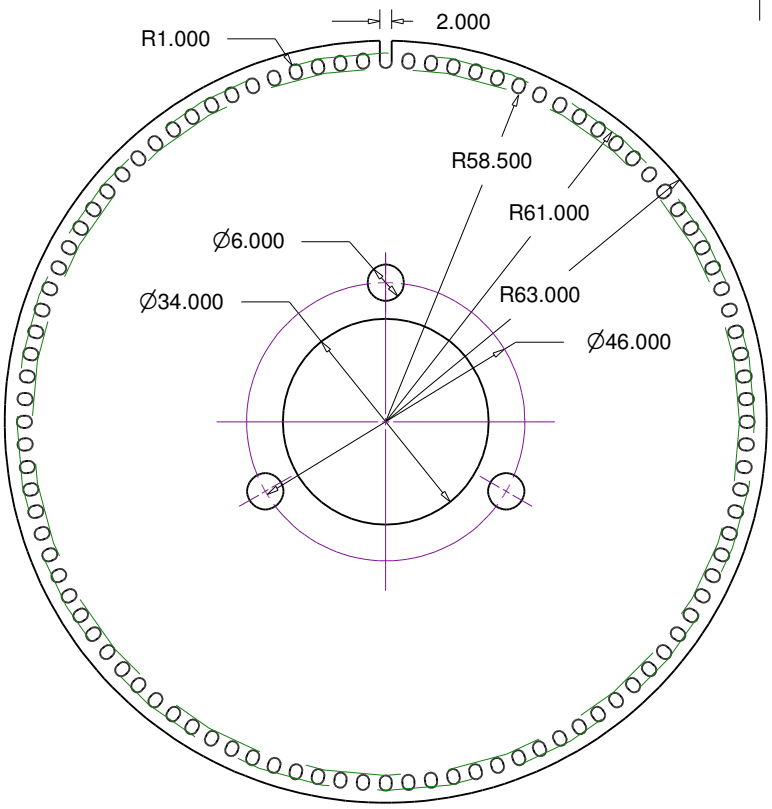


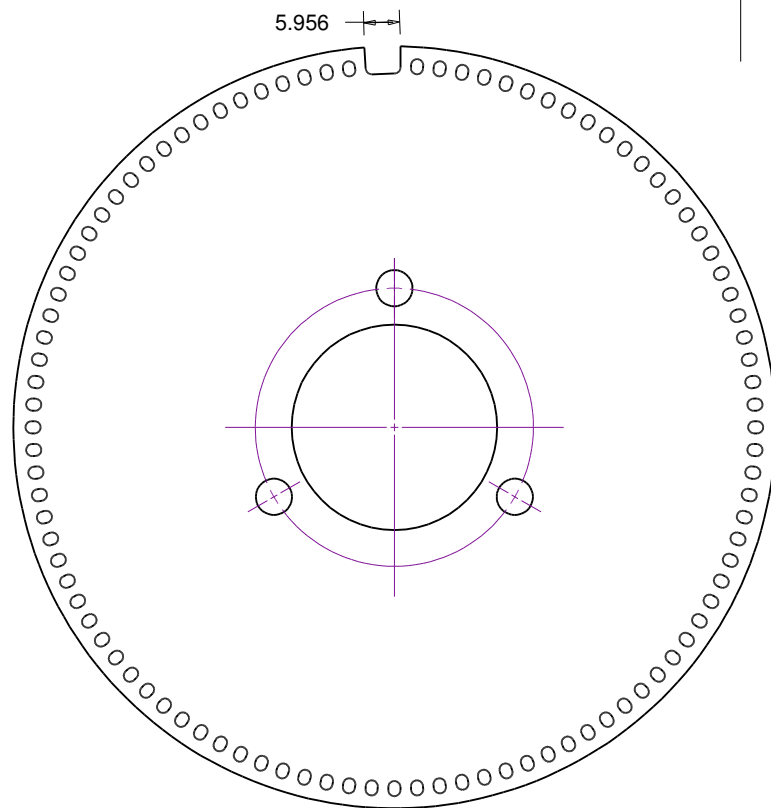


REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



	DRAWN OBH	DATE 6 Oct 2016	EMCO Compact 5 PC Update			
	CHECKED					
	QA		EMCO A6A 000 100 Timing Disk			
	MFG		SIZE A	FSCM NO.	DWG NO. DWG NO.	REV
	APPROVED		SCALE 1:1.25		SHEET 1 of 3	





REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED

Excerpt from MACH3 Turn manual regarding Index slot width:

Suppose the maximum speed of your spindle is N (rpm).

The slot angle required α (degrees) is given by

$$\alpha = 0.0012 \times N$$

If the diameter of the disc is D (inches or mm) then the slot width W (in same units) will be approximately

$$W = 0.0088 \times \alpha \times D$$

So for example if maximum spindle speed is 3000 RPM and disc diameter is 110 mm then:

$$\alpha = 0.0012 \times 3000 = 3.6^\circ$$

$$\text{Slot width} = 0.0088 \times 3.6 \times 110 = 3.48 \text{ mm}$$

$$\text{Big slot needs to be 50\% wider} = 3.48 \times 1.5 = 5.22 \text{ mm}$$

Slot width needed for Compact 5 - Modification to timing disk

Max RPM (N) = 2,800

Disk diameter (D) 126mm

$$\alpha = 0.0012 \times N (2800) = 3.36 \text{ degrees}$$

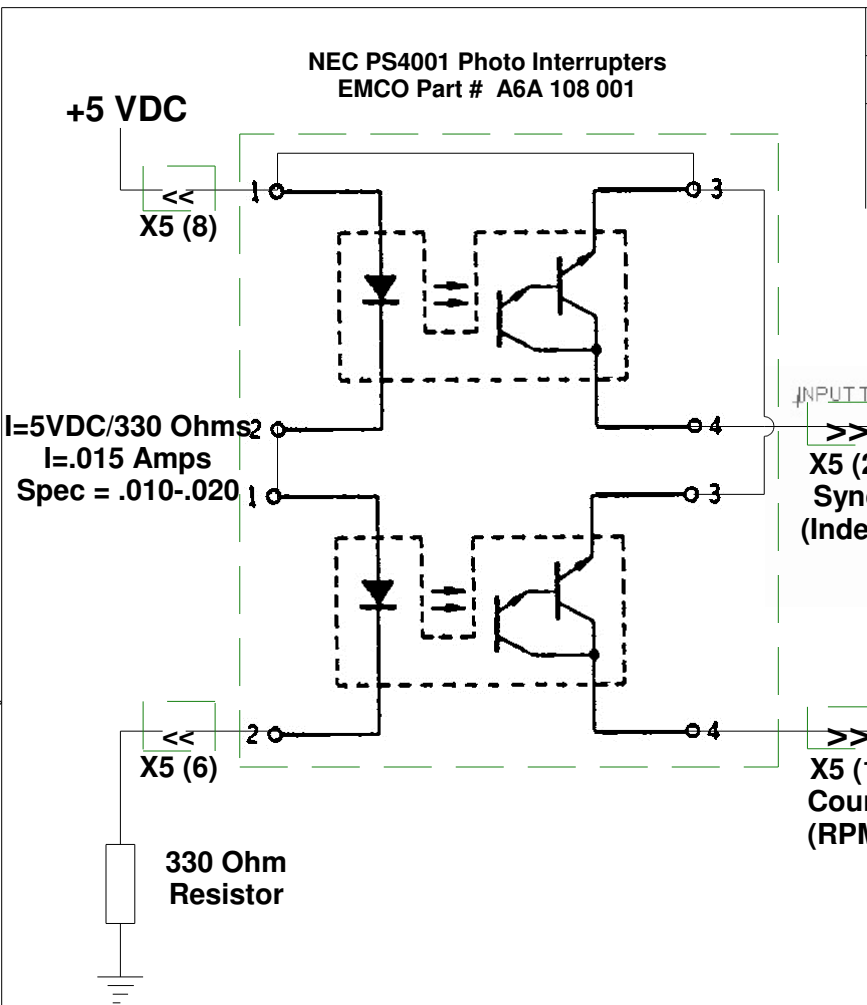
$$\text{Slot Width (W)} = 0.0088 \times 3.36 \times 110 = 3.25 \text{ mm}$$

$$\text{Slot needs to be 50\% wider or } 3.25 \text{ mm} \times 1.5 = 4.875 \text{ mm}$$

Removing the area shown will give a slot width of about 6mm

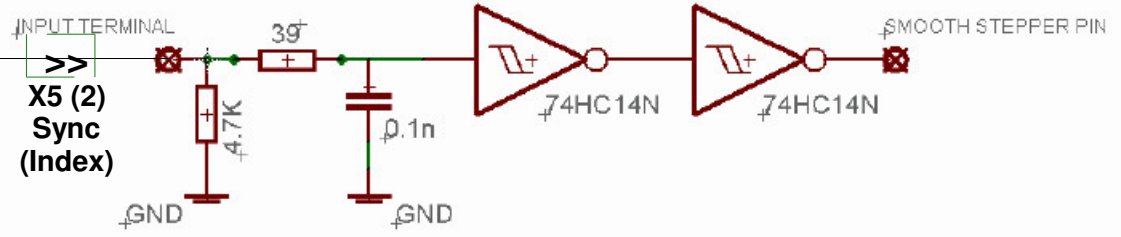
	DRAWN OBH	DATE 6 Oct 2016	EMCO Compact 5 PC Update			
	CHECKED					
	QA		Modified EMCO A6A 000 100 Timing Disk			
	MFG		SIZE A	FSCM NO.	DWG NO.	REV
	APPROVED		SCALE 1:1.25		DWG NO.	
			SHEET		2 of 3	





REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED

A Revised to show both interrupters and X5 connector pinout **5 Oct 2016**



Not Used
MACH3 only uses the Index pulse

	DRAWN OBH	DATE 6 Oct 2016	EMCO Compact 5 PC Update			
	CHECKED					
	QA		Photo Interrupter Wiring			
	MFG		SIZE A	FSCM NO.	DWG NO. DWG NO.	REV
	APPROVED		SCALE None		SHEET 3 of 3	