

## CLAUSING KONDIA FV1-CNC VARIABLE SPEED HEAD REBUILD PARTS LIST

As much as I offer the following information, I need to **STRESS** that I have not carried out the rebuild, and so may find out that there are other parts that are needed in due course. And as always, **you use this information at your own risk, I cannot guarantee the information in the Clausing-Kondia manuals as being correct!**

So, as far as I can determine, this lists the bearings and belts needed for a FV-1-CNC vari-speed head rebuild as per the specs in the Clausing-Kondia FV-1 CNC manual:

Kondia Part #	Needed	Part # on Drawing	Alternate	Notes
486-2 Bearing	1	FAG 6206-P6		
503-2 Timing Belt	1	Conti 1020	ContiTech 560-8M-30	New part #
825-10 Bearing	1	FAG 6007 2ZR C3		
826-10 Bearing	2	Timken 9110 PP	6010-ZZ used on the non-CNC machine	Appears to be interchangeable
827-10 Bearing	2	SKF 6008 JEM		
828-10 Bearing	2	SKF 6203 RS		
830-10 Variable Speed Drive Belt	1	ROFLEX 37J0910FR	Gates 2322V347 9804-0680	

It does not appear that the bearing manufacturer is critical since the specs are sufficient to source from multiple manufacturers. If in doubt, find a European or Japanese manufacturer (avoid Chinese makers).

I found a post that mentioned a couple of plastic sleeves used on the sheaves that might need replacing, but the posting seemed to indicate that it would be very unusual if they needed attention.

I do not have the part # for the bearing that sits under the motor: if anyone knows the spec of that bearing, please let me know.

1 x 825-10 FAFNIR BEARING FAG 6007 2ZR.C3  
 2 x 826-10 Fafnir Timken 9110-pp (or 6010-ZZ used on manual machine)  
 2 x 827-10 SKF-6008-JEM  
 2 x 828-10 SKF 6203-RS  
 1 x 486-10 6206-P6

1 x 830-10 DRIVE BELT CONT 20-85 - GATES EQU/IV 2322V347 Gates 9804-0680 VARIABLE SPEED BELT  
 1 x 503-2 TIMING BELT (BACK GEAR) - CONTINENTAL 560-8M-30

555-2	Special ring	717-10	Drive pan	755-10	Driving gear	798-10	Grid	868-10	Elastic pin Q 2 x 10
556-2	Conical pin	718-10	Balancing beam	756-10	Square head screw	825-10	FAFNIR bearing	869-10	Allen setscrew RM-5x5
557-2	Bakelite ball Q 35 RM-8	719-10	Balancing beam bushing	757-10	Cover	826-10	FAFNIR bearing	870-10	Allen setscrew RM-6x5
558-2	Allen screw RM 5x45	720-10	Traction springs	758-10	Gear shaft	827-10	FAFNIR bearing	871-10	Spring Q 5x1
560-2	Sleeve	721-10	Main pulley ring	759-10	Locking piece	828-10	6203 2 RS Bearings	872-10	Steel ball Q 5
564-2	Setscrew	722-10	Pulley fastening ring	760-10	Main motor	830-10	"Continental" belt 20-85 type	873-10	Allen setscrew RM-6x10
565-2	Aluminium elbow	723-10	Cover for main spindle bearing	761-10	Motor bushing	831-10	Elastic pin Q 3	874-10	Elastic ring E-10
566-2	Conical pin	724-10	Clutch ring	762-10	Spring rest	832-10	PHILLIPS screws Q 3	876-10	Allen screw RM-8x25
569-2	Steel felt	725-10	Upper cover of framework	763-10	Operating spring	833-10	ALLEN screws, RM-5x25	877-10	Elastic ring E-8
570-2	Felt washer	726-10	Shaft of brake operation	770-10	Operating support	834-10	ALLEN screws, RM-6x15	878-10	Allen setscrew RM-6x10
571-2	Quill skirt	727-10	Brake cams	771-10	Wormgear	835-10	Elastic ring E-38	880-10	Tapered balls 25x40
572-2	Washer	728-10	Splined bushing	772-10	Gear	836-10	Wavy washer Q 62	882-10	Allen screws RM-4x10
574-2	Greasing sleeve	729-10	Brake rotation bolt	773-10	Bushing	837-10	Washer Q 8	883-10	Allen setscrew RM-5x10
575-2	Sleeve	730-10	Brake bushing	774-10	Bushing	838-10	Nut RM-10	884-10	Cylindrical pin Q 5x22
579-2	Washer	731-10	Brake shaft bushing	775-10	Operating shaft bushing	839-10	Washer Q 10	885-10	Blind nut
581-2	Rivet	734-10	Key 5x4x4	776-10	Operating shaft	841-10	Nut RM-8	886-10	Screw RM-4x10
583-2	Allen screw	735-10	Key	777-10	Bushing	842-10	Cotter (shear) pin Q 3	887-10	Elastic pin Q 3x12
587-2	Setscrew	736-10	Splined shaft	778-10	Ring	844-10	Allen setscrew RM-6x10	888-10	Allen setscrew RM-6x10
588-2	Setscrew	737-10	Washer	779-10	Pin	845-10	Allen screws RM-10x25	889-10	Allen screw castellated head, RM-4x10
589-2	Pin	740-10	Splined hear hub	780-10	Metal sheet for air piping	850-10	Washer Q 12	890-10	Allen setscrew M-8x10
591-2	Washer	741-10	Sliding bearing box	781-10	Pin	851-10	RM-12 nut	891-10	Castellated screw M-4x12
600-2	Hauling key	742-10	Bushing	782-10	Regulating nut	852-10	Elastic ring I-68	892-10	Castellated screw M-3x12
601-2	Allen screw M 6x15	743-10	Spacing bushing	783-10	Chain	853-10	Allen screw RM-8x25	894-10	Allen set screw M-4 x 8
701-10	Belts cover	744-10	Lever hub	784-10	Regulating spindle	854-10	Elastic pin Q 3	895-10	Allen screw M-6x20
702-10	Gearbox	745-10	Tooth change shaft	785-10	Warning plate	856-10	Elastic ring E-50	896-10	Rivet
703-10	Main spindle support	746-10	Rotation plate	786-10	Firm plate	857-10	Cotter 8x8x30	897-10	Castellated screw M-3x5
704-10	Support	747-10	Locking nozzle	787-10	Handwheel	858-10	Wavy washer Q 40	898-10	Screw RM 10x30
705-10	Down cover of framework (housing)	748-10	Control lever	788-10	Handwheel hub	859-10	Nut RM-14	899-10	Grower washer Q 10
706-10	Pulley shaft clutch	749-10	Spring	789-10	Control handle	860-10	Washer Q 14		
707-10	Main spindle pulley	750-10	Clutch springs	790-10	Operating shaft	861-10	Hexagon-head screws RM-6x20		
708-10	Main sliding pulley	751-10	Guideways flanges	791-10	Speed plate	862-10	Allen setscrew RM-6x8		
709-10	Sliding motor pulley	752-10	Drive ring	792-10	Speed disk	863-10	Cotter 6x6x20		
709-H-10	Ring	753-10	Pins	793-10	Spindle feed plate	865-10	Elastic pin Q 6x15		
715-10	Main spindle brake	754-10	Protecting sheet	795-10	Speed change plate	866-10	Cotter 4x4x7		
				797-10	Lubrication plate	867-10	Allen screws RM-6x15		

154-2	Sleeve	191-2-A	Reverse clutch rod	405-2	Special pin	444-2	Worm gear spacer	494-2	Key 5x5x26
155-2	Sleeve	192-2-A	Feed worm shaft	407-2-A	Bearing spacer	445-2	Dowel pin	495-2	Timing belts
157-2	Quill housing	193-2-A	Feed shift rod	408-2-A	Cam rod	446-2	Cluster gear shift crank	504-2	Gts oil cup
158-2-A	Quill nose piece	194-2	Feed reverse bevel gear	409-2	Elastic pin	447-2	Anchorage shaft	508-2	M3 Washer
159-2-A	Quill stop micro screw	195-2	Feed bevel pinion	410-2	Trip plunger bushing	448-2	Micrometer nut	509-2	Allen screw RM 6x18
160-2	Quill lock sleeve	196-2	Cluster gear input shaft	411-2	Feed trip plunger bushing	449-2	Quill micro stop nut	510-2	Conical pin
161-2-A	Quill	197-2	Cluster gear shaft	412-2	Feed reverse trip plunger	450-2	Clock spring	511-2	Conical pin
162-2-B	Feed trip lever	198-2	Cluster gear cover	413-2	Reverse trip ball lever screw	452-2	Lever shaft	513-2	Special setscrew
163-2	Feed trip plunger	199-2	Shift crank	414-2	Cluster gear shaft upper bearing	460-2	Spring setscrew	514-2	Allen screw H 8x40
164-2-A	Discharge piston	200-2	Feed gear shifter fork	415-2	T-bolt	461-2	Spring	515-2	Key 4x4x25
165-2	Trip handle	201-2	Feed worm gear shaft sleeve	416-2	Black plastic ball handle 25 mm. dia.	463-2	Boston Worm	517-2	MB washer ignore h/lite
166-2	Quill stop knob	202-2	Worm gear cladle throw-out	417-2	Anchorage nozzle	464-2	Feed drive worm gear shaft	521-2	Bearing
167-2	Reverse trip ball lever	203-2-A	Worm gear cradle	418-2	Pinion Shaft Hub screw	465-2	Feed drive worm gear	522-2	Special setscrew
168-2-A	Cam rod sleeve assembly	204-2	T-Bolt	419-2	Quill pinion shaft bushing	466-2	Feed engage pin	523-2	Elastic ring Q E-10
169-2	Feed trip bracket	205-2	Sprocket	420-2	Pinion shaft worm gear spacer	467-2	Drawbar washer	524-2	Setscrew RM 6x8
170-2	Overload clutch worm gear	206-2	Graduated scale	421-2	Overload clutch lever spring plunger	468-2	Worm gear	525-2	Elastic ring Q E-15
171-2	Quill pinion	207-2	Safety clutch spring	422-2	Dowel pin	469-2	Worm shaft	526-2	Key 5x5x20
172-2	Overload clutch ring	208-2-1	Graduated area	423-2	Allen setscrew RM 6x20	471-2	Key 4x4x7.5	527-2	Hexagonal Head Screw RM 5x20
173-2-A	Overload clutch sleeve	210-2	Spindle bull gear	424-2	Overload clutch washer	472-2	Key 5x4x12	528-2	Key 5x5x16
174-2	Overload clutch trip lever	212-2	Castellated nut	425-2	Compression spring	474-2	Handwheel	529-2	Steel ball Q 5
175-2	Clutch arm cover	213-2	Timing belt pulley	426-2	Compression spring	474-2-A	Handwheel handle	530-2	Spring
176-2	Overload clutch	214-2	Timing belt pulley flange	427-2	Compression spring	475-2	Elastic ring E-16	531-2	Nozzle
178-2	Spring cover	231-2	Brake lock handle	428-2	Overload clutch locknut	476-2	Steel ball Q 5	532-2	Round head screw RM-4x18
179-2	Pinion shaft hub sleeve	232-2	Brake rotation screw	429-2	Clutch ring	477-2	Conical pin	532-A-2	Adjustment key
180-2-A	Pinion shaft hub	233-2-C	Main spindle	430-2	Washer	478-2	Elastic pin Q 4	533-2	Pin fastening screw
181-2	Quill pinion shaft	236-2	Cotter 10x8x15	431-2	Feed drive cluster gear	479-2	RM-8 nut	534-2	M 12 Nut (exagonal)
182-2	Bushing	241-2	Special setscrew	432-2	Feed drive cluster gear (center)	480-2	Key 5x3x9	535-2	M 12 special nut (exagonal)
183-2	Hollow head cap screw	243-2	Allen special setscrew	433-2	Feed drive cluster gear (upper)	481-2	Screw round Head RM 4x12	543-2	Washers Q 12
184-2	Feed reverse bevel gear	244-2	Allen special screw	434-2	Washer	482-2	Key 3x3x9	547-2	Setscrew
185-2-A	Coupling	245-2	Feed worm shaft bushing	435-2	Feed worm shaft bushing	483-2	Indicator rod	548-2	Pin
186-2	Conical pinion	398-2	Feed driving gear	436-2	Reverse knob	484-2	Conical pin	549-2	Key 4x4x30
187-2	Allen setscrew RM 6x15	399-2	Feed drive gear	437-2	Handle screw	485-2	Allen screw RM 5x15	550-2	Key 4x4x22
188-2	Angular contact ball bearing	400-2	Feed bevel gear	438-2-A	Spindle dirt shield	486-2	Bearing 6164-P6	551-2	Special key
189-2	Bushing	401-2	Quill lock bolt	441-2	Castellated nut (KM)	487-2	Roll pin	552-2	Key 4x4x45
190-2-A	Hand wheel coupling	404-2	RM 4x8 pin	443-2	Shift sleeve	488-2	Conical pin	554-2	Special ring





