



ELECTRICAL CIRCUIT DIAGRAMS

QUICK TURN NEXUS
300/350

MANUAL NO. DD331090010A

MANUAL NO.

ELEMENTARY DIAGRAM LIST

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SET No. : DD331090010

No.	ITEM	SPECIFICATION
1	MACHINE TYPE	QUI CK TURN NEXUS 300/350
2	MACHINE No.	STANDARD
3	CNC TYPE	M640T NEXUS
4	PLC ROM No.	
5	AUX ROM No.	
6	SPINDLE 1 TYPE	QTN300/QTN350: SJ-4B6913K
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APR' D BY	CHK' D BY	DRWN BY
美濃制御  '05.05.07 N. YASUE	制御設計16  '05.05.07 K. YASUDA	美濃制御16  '05.05.07 F. HORI UCHI

Remarks	
(*1) EXCHANGED DD331090000	(*6) EXCHANGED DD331090005
(*2) EXCHANGED DD331090001	(*7) EXCHANGED DD331090006
(*3) EXCHANGED DD331090002	(*8) EXCHANGED DD331090007
(*4) EXCHANGED DD331090003	(*9) EXCHANGED DD331090008
(*5) EXCHANGED DD331090004	(*10) EXCHANGED DD331090009

Option

No.	DRAWING NUMBER	TITLE
1	331090100010	ELECTRICAL CAPACITY LIST (*2)
2	331090100110	M CODE LIST (1) (*2)
3	331090100120	M CODE LIST (2) (*2)
4	331090100130	M CODE LIST (3) (*2)
5	331090100140	M CODE LIST (4) (*2)
6	331090100150	M CODE LIST (5) (*2)
7	331090100160	M CODE LIST (6) (*2)
8	331090100170	M CODE LIST (7) (*2)
9	331090100180	M CODE LIST (8) (*2)
10	331090100190	M CODE LIST (9) (*2)
11	331090100200	M CODE LIST (10) (*2)
12	331090100211	M CODE LIST (11) (*7)
13	331090100311	MACHINE PARAMETER TIMER (1) (*8)
14	331090100323	MACHINE PARAMETER TIMER (2) (*8)
15	331090100332	PLC PARAMETER DATA (1) (*8)
16	331090100342	PLC PARAMETER DATA (2) (*7)
17	331090100352	PLC PARAMETER BIT (1) (*8)
18	331090100362	PLC PARAMETER BIT (2) (*8)
19	331090100374	PLC PARAMETER BIT (3) (*8)
20	331090100382	PLC PARAMETER BIT (4) (*8)
21	331090100391	PLC PARAMETER BIT (5) (*6)
22	331090100401	PLC PARAMETER DATA (3) (*6)
23	331090100413	PLC PARAMETER DATA (4) (*7)
24	331090100420	PLC PARAMETER DATA (5) (*8)
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No.	DRAWING NUMBER	TITLE
26	331090300010	BLOCK LINE DRAWING (JPN)
27	331090300020	BLOCK LINE DRAWING (YMC)
28	331090300030	BLOCK LINE DRAWING (YME)
29	331090300043	BLOCK LINE DRAWING (AC100V DC24V LINE) (*7)
30	331090300110	CABLE DIAGRAM BUS LINE
31	331090300132	REMOTE I/O CONNECTION (*7)
32	331090300142	SPINDLE HEAD BOX CONNECTION (1) (*7)
33	331090300151	SPINDLE HEAD BOX CONNECTION (2) (*7)
34	331090300161	CARRIAGE CONNECTION (*7)
35	331090300171	CONTROL BOX SIDE CONNECTION (*7)
36	331090300181	RELAY PCB CONNECTION (*7)
37	331090300190	NC OPERATING BOX CONNECTION (*7)
38	331090300212	MACHINE COMPONENTS LAYOUT (1) (*5)
39	331090300220	MACHINE COMPONENTS LAYOUT (2) (*2)
40	331090300231	MACHINE COMPONENTS LAYOUT (3) (*7)
41	331090300240	MACHINE COMPONENTS LAYOUT (4) (*2)
42	331090300250	CONTROL BOX ZL BRACKET (*7)
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44	331090400014	LINE POWER SUPPLY (JPN) (*10)
45	331090400025	LINE POWER SUPPLY (YMC) (*10)
46	331090400033	LINE POWER SUPPLY (YME) (*5)
47	331090400040	POWER SUPPLY UNIT (JPN/YMC)
48	331090400051	POWER SUPPLY UNIT (YME) (*7)
49	331090400071	MAIN SPINDLE DRIVE (*10)
50	331090400080	SPINDLE MOTOR COIL CHANGE (JPN/YMC)
51	331090400090	SPINDLE MOTOR COIL CHANGE (YME)
52	331090400102	MAIN SPINDLE FEED BACK (*9)
53	331090400142	X-AXIS SERVO MOTOR (JPN/YMC/YME) (*10)
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55	331090400160	X-AXIS SERVO FEED BACK (MOTOR END)
56	331090400170	Z-AXIS SERVO MOTOR
57	331090400180	Z-AXIS SERVO FEED BACK (MOTOR END)
58	331090400230	HYDRAULIC PUMP MOTOR
59	331090400240	HEAD COOLING RADIATOR FAN MOTOR
60	331090400251	COOLANT PUMP MOTOR (*6)

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No.	DRAWING NUMBER	TITLE
61	331090400261	CHIP CONVEYOR (OPTION) (JPN/YMC) (*6)
62	331090400271	CHIP CONVEYOR (OPTION) (YME) (*6)
63	331090400292	AC100V/DC24V CONTROL (JPN/YMC) (*10)
64	331090400302	AC100V/DC24V CONTROL (YME) (*10)
65	331090400311	EMERGENCY STOP CIRCUIT (JPN/YMC) (*4)
66	331090400320	EMERGENCY STOP CIRCUIT (YME) (1)
67	331090400330	EMERGENCY STOP CIRCUIT (YME) (2)
68	331090400341	EMERGENCY STOP CIRCUIT (YME) (3) (*10)
69	331090400360	DOOR INTERLOCK CIRCUIT (JPN/YMC)
70	331090400370	DOOR INTERLOCK CIRCUIT (YME) (1)
71	331090400380	DOOR INTERLOCK CIRCUIT (YME) (2)
72	331090400390	DC24V SUPPLY TO NC DI/O
73	331090400400	REMOTE I/O COMMON LINE (1)
74	331090400410	REMOTE I/O COMMON LINE (2)
75	331090400420	REMOTE I/O COMMON LINE (3) (*1)
76	331090400441	FAN MOTORS (*7)
77	331090400461	HEAD COOLING PUMP MOTOR (*2)
78	331090400473	GREASE PUMP MOTOR (*10)
79	331090400481	LUBE PUMP MOTOR (*10)
80	331090400492	TURRET DRIVE (JPN/YMC) (*8)
81	331090400502	TURRET DRIVE (YME) (*8)
82	331090400512	NC TAIL (*10)
83	331090400531	MAIN SPINDLE CHUCK (*3)
84	331090400543	WORK LIGHT (*5)
85	331090400551	TOOL EYE (1) (JPN:OP. YMC/YME:STD.) (*7)
86	331090400560	TOOL EYE (2) (JPN:OP. YMC/YME:STD.)
87	331090400573	MAIN BREAKER SHUNT TRIP (*7)
88	331090400592	ALARM CIRCUIT (*8)
89	331090400621	WORK REST (OPTION) (*3)
90	331090400630	SOLENOID VALVES (OPTION)
91	331090400640	AUTO PARTS CATCHER (OPTION)
92	331090400650	AIR PRESSURE SW.
93	331090400661	AUTO DOOR (OPTION) (*7)
94	331090400670	ADDITIONAL M CODE (OPTION)
95	331090400680	AUTO DOOR EDGE SENSOR (OPTION) (*7)

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No.	DRAWING NUMBER	TITLE
96	331090400692	OPERATING BOX (1) (*9)
97	331090400701	OPERATING BOX (2) (*9)
98	331090400710	OPERATING BOX INPUT (1)
99	331090400720	OPERATING BOX INPUT (2)
100	331090400730	OPERATING BOX INPUT (3)
101	331090400741	OPERATING BOX OUT PUT (*1)
102	331090400750	NETWORK I/F
103	331090400771	INDICATOR LIGHT (OPTION) (*7)
104	331090400781	AUTO POWER ON/OFF & WARM UP (OPTION) (*7)
105	331090400800	COOLANT CHILLER UNIT (OPTION)
106	331090400810	MAGNUM COOLANT I/F (OPTION)
107	331090400820	DRAW UP PUMP MOTOR (MAGNUM COOLANT OPTION)
108	331090400831	MIST COLLECTOR (OPTION) (*2)
109	331090400840	MMS INTERFACE DIAGRAM
110	331090400861	IKURA BAR FEEDER I/F S TYPE (OPTION) (*7)
111	331090400871	IKURA BAR FEEDER I/F (OPTION) (*7)
112	331090400881	ALPS BAR FEEDER I/F (OPTION) (*7)
113	331090400891	ALPS BAR FEEDER I/F (OPTION) (*7)
114	331090400901	YMU CYCLE BAR FEEDER I/F (OPTION) (*7)
115	331090400911	YMU CYCLE BAR FEEDER I/F (OPTION) (*7)
116	331090400930	GANTRY ROBOT I/F (M640GL)
117	331090400940	GANTRY ROBOT I/F (M640GL)
118	331090400950	EMERGENCY STOP CIRCUIT (2) (M640GL)
119	331090400970	WORK CONVEYOR (OPTION)
120	331090400990	INVERTER CHIP CONVEYOR I/F
121	331090401012	HIGH PRESSURE COOLANT (SUPER FLOW V7USA) (1) (*7)
122	331090401023	HIGH PRESSURE COOLANT (SUPER FLOW V7USA) (2) (*7)
123	331090401040	RELAY CONTACTS REMOTE I/O (LNS BF)
124	331090401050	REMOTE I/O RELAY CONTACTS (LNS BF)
125	331090401060	E-STOP CIRCUIT (LNS BF)
126	331090401070	BARFEEDER INPUTS (LNS BF)
127	331090401080	RELAY COIL LAYOUT ON I/O BOARD (LNS BF)
128	331090401090	REMOTE TERMINAL KIT MAZA-CARE TYPE 1 (*9)
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No.	DRAWING NUMBER	TITLE
131	331090500015	PARTS ARRANGEMENT ON CONTROL BOX (*8)
132	331090500020	PARTS ARRANGEMENT ON BREAKER BOX (*2)
133	331090500034	TERMINAL BLOCK (XT1) LAYOUT (*8)
134	331090500073	PARTS ARRANGEMENT ON POWER PANEL (1) (JPN/YMC) (*8)
135	331090500083	PARTS ARRANGEMENT ON POWER PANEL (2) (YME) (*8)
136	331090500093	PARTS ARRANGEMENT ON PCB PANEL (*7)
137	331090500101	PARTS ARRANGEMENT ON BASE PANEL (*7)
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No.	DRAWING NUMBER	TITLE
166		- PARTS LIST -
167	G331001A001	CONTROL PANEL (2PAGES) (*10)
168	G331001B000	CONTROL PANEL (2PAGES) (*10)
169	G331001C000	CONTROL PANEL (2PAGES) (*10)
170	G331011A003	OPERATING BOARD (2PAGES) (*7)
171	G331020A001	TRANSFORMER (2PAGES) (*3)
172	G331021A003	COOLANT PUMP (2PAGES) (*10)
173	G331022A007	MACHINE CABLE (2PAGES) (*10)
174	G331023A002	CARRIAGE CONNECTION (2PAGES) (*10)
175	G331026A006	HEAD CONNECTION (2PAGES) (*10)
176	G331026B000	HEAD CONNECTION (2PAGES) (*10)
177	G331028A003	GREASE UNIT (2PAGES) (*10)
178	G331030A002	HYDRAULIC PUMP (2PAGES) (*10)
179	G331042A001	FOOT SWITCH (2PAGES) (*2)
180	G331043A002	TAIL BRAKE (2PAGES) (*10)
181	G331047A000	CHUCK AIR BLOW (2PAGES)
182	G331049A001	LUBE PUMP (2PAGES) (*10)
183	G331050A004	CHIP CONVEYOR (2PAGES) (*10)
184	G331051A000	TURRET AIR BLOW (2PAGES)
185	G331056A001	WORK MEASURE (2PAGES) (*10)
186	G331057A002	TOOL EYE (2PAGES) (*10)
187	G331058A003	INDICATOR LIGHT (2PAGES) (*10)
188	G331059A001	WORK CONVEYOR (2PAGES) (*10)
189	G331060A001	AUTO POWER ON/OFF + WARM UP (2PAGES) (*7)
190	G331063A002	AUTO DOOR (2PAGES) (*10)
191	G331065A003	COOLANT CHILLER (2PAGES) (*10)
192	G331066A000	PARTS CATCHER (2PAGES)
193	G331068A003	MIST COLLECTOR (2PAGES) (*10)
194	G331069A005	WORK REST (2PAGES) (*10)
195	G331076A001	HYDRAULIC PRESSURE SWITCH (2PAGES) (*10)
196	G331077A000	KEY BOARD, MOUSE, PRINTER PORT (2PAGES)
197	G331078A001	YMC SUPER FLOW COOLANT (2PAGES) (*10)
198	G331079A000	PCMCIA I/F, IC MEMORY CARD I/F (2PAGES) (*7)
199	G331089A000	MAZA-CARE (2PAGES) (*9)
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No.	DRAWING NUMBER	TITLE
201	G3310A0A001	QTN300/350 AMP PANEL (2PAGES) (*3)
202	G3310A1A005	QTN300/350 POWER PANEL (2PAGES) (*8)
203	G3310A2A003	QTN300/350 PCB PANEL (2PAGES) (*10)
204	G3310A5A001	QTN300/350 BASE PANEL (2PAGES) (*7)
205	G3310B9A003	QTN300/350 BREAKER BOX (2PAGES) (*10)
206	G3310F0A001	MAIN BREAKER LAEKAGE TYPE (2PAGES) (*5)
207	G3310F1A001	OPTION COOLANT (2PAGES) (*7)
208	G3310F9A002	OPTION REMOTE I/O (2PAGES) (*7)
209	G3310G0A004	CHIP CONVEYOR (2PAGES) (*10)
210	G3310G4A004	BAR FEEDER I/F (2PAGES) (*10)
211	G3310G6A003	WORK MEASURE (2PAGES) (*10)
212	G3310G7A001	TOOL EYE (2PAGES) (*7)
213	G3310G8A003	INDICATOR LIGHT (2PAGES) (*6)
214	G3310G9A001	WORK CONVEYOR (2PAGES) (*10)
215	G3310H0A003	AUTO POWER ON/OFF + WARM UP (2PAGES) (*7)
216	G3310H3A002	AUTO DOOR (2PAGES) (*8)
217	G3310H6A002	COOLANT CHILLER (2PAGES) (*10)
218	G3310H8A004	MIST COLLECTOR (2PAGES) (*10)
219	G3310H9A001	WORK REST (2PAGES) (*6)
220	G3310K6A000	ADDITIONAL M CODE (2PAGES)
221	G3310K8A004	SUPER FLOW COOLANT (2PAGES) (*10)
222	G3310K9A000	BATTERY UNIT (2PAGES)
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