CONFIDENCE: MEDIUM

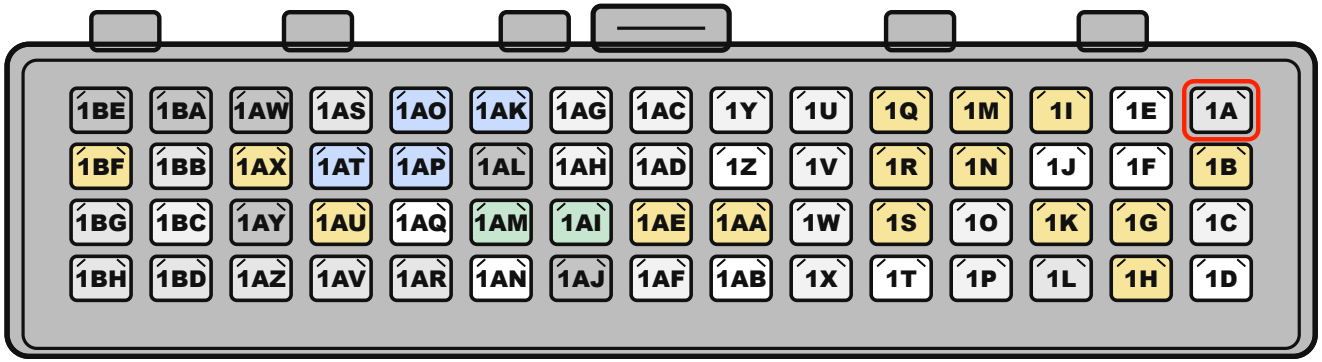
PCM PINOUT · RX-8 · SE 13B-MSP

CONNECTOR 1 (PCM(F), FRONT HARNESS) · 60-WAY (1A-1BH)

VIEW: LOOKING INTO THE ECU HEADER (SAME VIEW AS THE WIRE / BACK SIDE OF THE HARNESS PLUG) · THE PLUG'S MATING FACE READS MIRRORED

RENESIS 13B-MSP · VIN JMZ SE173*** 300001 ON | DENSO PCM · 2 X 60-WAY (120 TERMINALS) · DBW · CAN · IMMOBILISER

POWER · GROUND · TRIGGER (CKP/CMP) · SENSOR IN · DRIVER / OUTPUT · COMMS / DIAG · OTHER / BODY · UNKNOWN / NC



FOJI SKETCH · PIN 1A RINGED (TOP-RIGHT) · KEYING INDICATIVE, CONFIRM ON PLUG

REAL CONNECTOR FACE (4 ROWS X 15, NO BLANKS). LOOKING INTO THE PCM HEADER, THE SAME VIEW AS THE WIRE/BACK SIDE OF THE HARNESS PLUG, MATCHING THE MX-5 SHEETS. TWO 60-WAY CONNECTORS, 4 ROWS X 15, NO MOULDED BLANKS. LETTERS RUN DOWN EACH COLUMN FROM THE RIGHT-HAND END (1A 1B 1C 1D OUTERMOST, THEN 1E-1H, TO 1BE-1BH AT THE LEFT). PIN A IS TOP-RIGHT. FACE READ CELL BY CELL OFF THE FACTORY PCM INSPECTION FIGURE AM6ZZW00000123 (SM2274460), CAPTIONED PCM / HARNESS SIDE CONNECTOR WITH MAZDA'S WIRE-SIDE VIEW ICON, AND CROSS-READ AGAINST THE B1-01 PCM(F) AND PCM(E2) FACES IN THE RHD AND LHD ENGINE CONTROL SYSTEM BOOKS: 120 OF 120 CELLS AGREE. NOT YET RUNG OUT ON A CAR, AND NO DONOR PLUG, SO THE HOUSING KEYING IS UNDRAWN.

PIN	FUNCTION	WIRE	I/O
1A	GND	B	GND
1B	STARTER CUT-OFF CONTROL (STARTER RELAY)	R/L	OUT
1C	NOT USED	-	-
1D	CLUTCH OPERATION (CPP SWITCH) [M/T ONLY (TABLE *1, AND THE WIRING MARKS THE CAVITY % = M/T)]	V	IN
1E	METERING OIL PUMP NO.1 MONITOR	G/L	IN
1F	METERING OIL PUMP NO.2 MONITOR	G/R	IN
1G	AIR PUMP CONTROL (AIR PUMP RELAY)	L/R	OUT
1H	FUEL PUMP CONTROL (FUEL PUMP RELAY)	L/B	OUT
1I	A/C CUT-OFF CONTROL (A/C RELAY)	G/B	OUT
1J	A/C LOAD (REFRIGERANT PRESSURE SWITCH, MIDDLE)	R/B	IN
1K	FUEL PUMP SPEED CONTROL (FUEL PUMP SPEED CONTROL RELAY)	LG	OUT
1L	SENSOR GND (MAF SENSOR)	B/W	GND
1M	ELECTRICAL FAN CONTROL (COOLING FAN RELAY NO.1)	GY/W	OUT
1N	ELECTRICAL FAN CONTROL (COOLING FAN RELAY NO.2, NO.3)	L/W	OUT
1O	NOT USED	-	-
1P	NOT USED	-	-
1Q	MAIN RELAY CONTROL	P/B	OUT
1R	ELECTRICAL FAN CONTROL (COOLING FAN RELAY NO.4, NO.5)	W/L	OUT
1S	METERING OIL PUMP NO.1 CONTROL (METERING OIL PUMP DRIVER)	R	OUT
1T	COOLANT LEVEL SWITCH	V/W	IN
1U	NOT USED	-	-
1V	NOT USED	-	-
1W	NOT USED	-	-
1X	NOT USED	-	-
1Y	NOT USED	-	-
1Z	STARTER SIGNAL	L/Y	IN
1AA	METERING OIL PUMP NO.2 CONTROL (METERING OIL PUMP DRIVER)	R/G	OUT
1AB	BRAKE SWITCH [CRUISE CARS / FROM VIN FE10**-301152 (TABLE *3)]	L/O	IN
1AC	NOT USED	-	-
1AD	NOT USED	-	-
1AE	VFAD CONTROL (VFAD SOLENOID VALVE, WITH VFAD)	O	OUT
1AF	NOT USED	-	-
1AG	NOT USED	-	-
1AH	NOT USED	-	-
1AI	CAN_L	G/B	I/O
1AJ	CONSTANT VOLTAGE (VREF) (APP SENSOR)	R/Y	PWR
1AK	MAF SENSOR	Y/R	IN
1AL	CONSTANT VOLTAGE (VREF) (APP SENSOR) [CONFLICT: G/R ON THE RHD BOOK WD498513, Y/G ON THE LHD TWIN WD498467]	G/R	PWR
1AM	CAN_H	L/W	I/O
1AN	ECT (A/C UNIT)	R/L	IN
1AO	APP SENSOR 1 (APP SENSOR NO.1)	W/R	IN
1AP	APP SENSOR 2 (APP SENSOR NO.2)	R/W	IN
1AQ	CRUISE CONTROL SWITCH [CRUISE CARS / FROM VIN FE10**-301152 (TABLE *3)]	G/Y	IN
1AR	SENSOR GND (IAT SENSOR)	B/G	GND
1AS	SENSOR GND (APP SENSOR)	GY	GND
1AT	IAT SENSOR	B/O	IN
1AU	A/C CONTROL (REFRIGERANT PRESSURE SWITCH HIGH / LOW, A/C SWITCH)	LG/R	OUT
1AV	SENSOR GND (APP SENSOR)	LG/B	GND
1AW	POWER SUPPLY (MAIN RELAY)	B/L	PWR
1AX	DRIVE-BY-WIRE RELAY CONTROL	L	OUT
1AY	IG1 (IGNITION RELAY)	B/W	PWR
1AZ	GND	B	GND
1BA	BACKUP POWER SUPPLY (BATTERY)	L/R	PWR
1BB	GND	B	GND
1BC	NOT USED	-	-
1BD	GND	B	GND
1BE	POWER SUPPLY (MAIN RELAY)	B/L	PWR
1BF	DRIVE-BY-WIRE RELAY CONTROL	W/B	OUT
1BG	GND (CRUISE CONTROL SWITCH) [CONFLICT: THE TERMINAL TABLE FOOTNOTES THIS *3 (CRUISE / FROM FE10**-301152), THE WIRING MARKS THE CAVITY % = M/T]	B/G	GND
1BH	GND	B	GND

VERIFY ON CAR: RING OUT EVERY PIN AND CONFIRM WIRE COLOURS AGAINST THE CAR. MAZDA HARNESS COLOURS CHANGE BETWEEN SUB-YEAR BUILDS AND MARKETS.

SOURCE: Functions from the Mazda MGSS PCM INSPECTION terminal voltage table SM2274460 (13B-MSP, carline RX-8(SE) JMZ SE173*** 300001 on): 120 terminals, 93 named, 27 dashed. Face read cell by cell off that document's own figure am6zzw00000123, captioned PCM / HARNESS SIDE CONNECTOR with Mazda's wire-side view icon, so no rotation and no mirror. Colours from the Mazda RHD ENGINE CONTROL SYSTEM book WD498513, read as PDF text with coordinates rather than off a scan, from the B1-01 PCM(F) and PCM(E2) faces on six of its pages, and cross-read against the LHD twin WD498467: 119 of the 120 cavities agree, 1AL alone differs (G/R on RHD, Y/G on LHD, the APP sensor Vref on the driver's side) and the row is flagged. Table and faces corroborate each other completely on membership: all 93 named terminals carry a colour and all 27 dashed terminals are drawn vacant, 120 of 120. That is two Mazda documents on the functions and on the face, but only ONE wiring edition on the colours, and Autodata publishes no rotary, so this block is MEDIUM and not HIGH. Wiring legend % = MT, carried by 1D and 1BG. Table footnotes: *1 M/T, *2 13B-MSP high power, *3 cruise switch or from FE10**-301152. LATE PCM ONLY: the early carline SE1736** 100001-299999 runs a different five-connector PCM lettered 1A to 5AF, 139 named terminals (PCM INSPECTION SM2601127), drawn in WD498379 and WD498422. It is not covered here. Not rung out on a car, no RX-8 donor plug, so the housing keying is undrawn. FOJI internal reference, corroborated 2026-06. Original FOJI compilation, not reproduced from Mazda artwork.

CONFIDENCE: MEDIUM

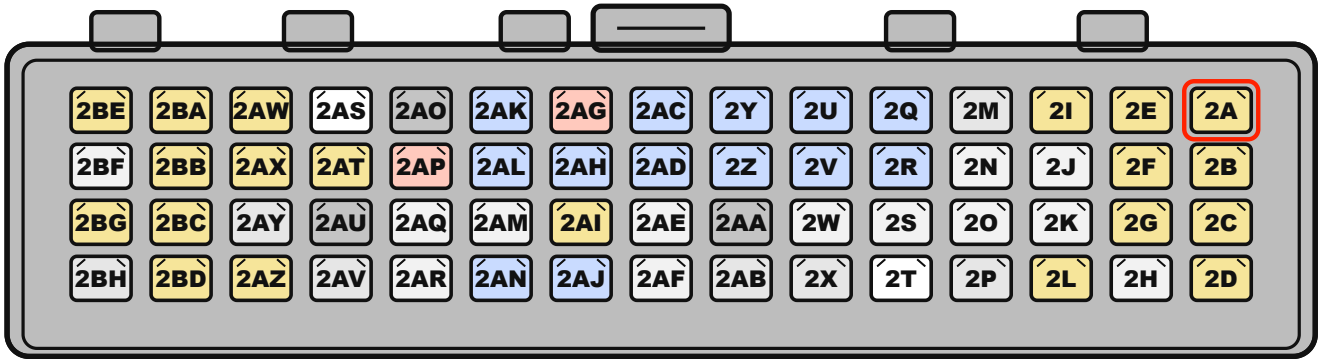
PCM PINOUT · RX-8 · SE 13B-MSP

CONNECTOR 2 (PCM(E2), ENGINE HARNESS) · 60-WAY (2A-2BH)

VIEW: LOOKING INTO THE ECU HEADER (SAME VIEW AS THE WIRE / BACK SIDE OF THE HARNESS PLUG) · THE PLUG'S MATING FACE READS MIRRORED

RENESIS 13B-MSP · VIN JMZ SE173*** 300001 ON | DENSO PCM · 2 X 60-WAY (120 TERMINALS) · DBW · CAN · IMMOBILISER

POWER · GROUND · TRIGGER (CKP/CMP) · SENSOR IN · DRIVER / OUTPUT · COMMS / DIAG · OTHER / BODY · UNKNOWN / NC



FOJI SKETCH · PIN 2A RINGED (TOP-RIGHT) · KEYING INDICATIVE, CONFIRM ON PLUG

REAL CONNECTOR FACE (4 ROWS X 15, NO BLANKS). LOOKING INTO THE PCM HEADER, THE SAME VIEW AS THE WIRE/BACK SIDE OF THE HARNESS PLUG, MATCHING THE MX-5 SHEETS. TWO 60-WAY CONNECTORS, 4 ROWS X 15, NO MOULDED BLANKS. LETTERS RUN DOWN EACH COLUMN FROM THE RIGHT-HAND END (1A 1B 1C 1D OUTERMOST, THEN 1E-1H, TO 1BE-1BH AT THE LEFT). PIN A IS TOP-RIGHT. FACE READ CELL BY CELL OFF THE FACTORY PCM INSPECTION FIGURE AM6ZZW00000123 (SM2274460), CAPTIONED PCM / HARNESS SIDE CONNECTOR WITH MAZDA'S WIRE-SIDE VIEW ICON, AND CROSS-READ AGAINST THE B1-01 PCM(F) AND PCM(E2) FACES IN THE RHD AND LHD ENGINE CONTROL SYSTEM BOOKS: 120 OF 120 CELLS AGREE. NOT YET RUNG OUT ON A CAR, AND NO DONOR PLUG, SO THE HOUSING KEYING IS UNDRAWN.

PIN	FUNCTION	WIRE	I/O
2A	THROTTLE CONTROL (+) (THROTTLE VALVE ACTUATOR)	R/B	OUT
2B	THROTTLE CONTROL (-) (THROTTLE VALVE ACTUATOR)	R	OUT
2C	PURGE SOLENOID VALVE CONTROL	R/Y	OUT
2D	APV MOTOR CONTROL (+)	G/B	OUT
2E	OCV CONTROL	LG	OUT
2F	APV MOTOR CONTROL (-)	L/R	OUT
2G	AIR CONTROL (AIR SOLENOID VALVE)	R/L	OUT
2H	NOT USED	-	-
2I	SSV CONTROL (SSV SOLENOID VALVE)	L/Y	OUT
2J	NOT USED	-	-
2K	NOT USED	-	-
2L	VDI CONTROL (VDI SOLENOID VALVE) [13B-MSP HIGH POWER ONLY (TABLE *2)]	W/L	OUT
2M	SENSOR GND (OIL PRESSURE SENSOR)	BR	GND
2N	NOT USED	-	-
2O	NOT USED	-	-

PIN	FUNCTION	WIRE	I/O
2P	SENSOR GND (TP SENSOR)	G/Y	GND
2Q	HO2S	Y	IN
2R	OIL PRESSURE SENSOR	G	IN
2S	NOT USED	-	-
2T	OIL-LEVEL SWITCH	GY/R	IN
2U	KS NO.1 (+)	Y/R	IN
2V	KS NO.1 (-)	Y/B	IN
2W	NOT USED	-	-
2X	SHIELD (A/F SENSOR, ECCENTRIC SHAFT POSITION SENSOR)	B	GND
2Y	KS NO.2 (-)	G	IN
2Z	A/F SENSOR	P	IN
2AA	CONSTANT VOLTAGE (VREF) (OIL PRESSURE SENSOR)	R/W	PWR
2AB	SHIELD (KS NO.1, KS NO.2)	B	GND
2AC	KS NO.2 (+)	L	IN
2AD	A/F SENSOR	V	IN

PIN	FUNCTION	WIRE	I/O
2AE	NOT USED	-	-
2AF	NOT USED	-	-
2AG	ECCENTRIC SHAFT POSITION SENSOR (+)	Y/B	IN
2AH	ECT SENSOR	G/W	IN
2AI	FIELD COIL CONTROL (GENERATOR, D TERMINAL)	BR/R	OUT
2AJ	GENERATOR OUTPUT VOLTAGE (GENERATOR, TERMINAL P)	W/G	IN
2AK	THROTTLE VALVE OPENING ANGLE NO. 1 (TP SENSOR NO.1)	G/R	IN
2AL	THROTTLE VALVE OPENING ANGLE NO. 2 (TP SENSOR NO.2)	B/L	IN
2AM	NOT USED	-	-
2AN	APV OPENING ANGLE (APV POSITION SENSOR)	R/G	IN
2AO	CONSTANT VOLTAGE (VREF) (TP SENSOR)	G	PWR
2AP	ECCENTRIC SHAFT POSITION SENSOR (-)	Y/R	IN
2AQ	NOT USED	-	-
2AR	NOT USED	-	-
2AS	NEUTRAL SWITCH [M/T ONLY (TABLE *1)]	L/R	IN

PIN	FUNCTION	WIRE	I/O
2AT	IGNITION COIL (L/R) CONTROL	Y/G	OUT
2AU	CONSTANT VOLTAGE (VREF) (APV POSITION SENSOR)	L/G	PWR
2AV	SENSOR GND (APV POSITION SENSOR)	B/O	GND
2AW	IGNITION COIL (T/R) CONTROL	L/O	OUT
2AX	IGNITION COIL (L/F) CONTROL	G	OUT
2AY	SENSOR GND (ECT SENSOR)	GY	GND
2AZ	FUEL INJECTOR (RS) CONTROL	L/B	OUT
2BA	IGNITION COIL (T/F) CONTROL	W	OUT
2BB	FUEL INJECTOR (FP) CONTROL	LG/R	OUT
2BC	FUEL INJECTOR (FS) CONTROL	G/R	OUT
2BD	FUEL INJECTOR (RP) CONTROL	LG/B	OUT
2BE	HO2S HEATER CONTROL	R	OUT
2BF	NOT USED	-	-
2BG	A/F SENSOR HEATER CONTROL	L/O	OUT
2BH	SENSOR GND (HO2S)	W/G	GND

VERIFY ON CAR: RING OUT EVERY PIN AND CONFIRM WIRE COLOURS AGAINST THE CAR. MAZDA HARNESS COLOURS CHANGE BETWEEN SUB-YEAR BUILDS AND MARKETS.

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