CONFIDENCE: HIGH

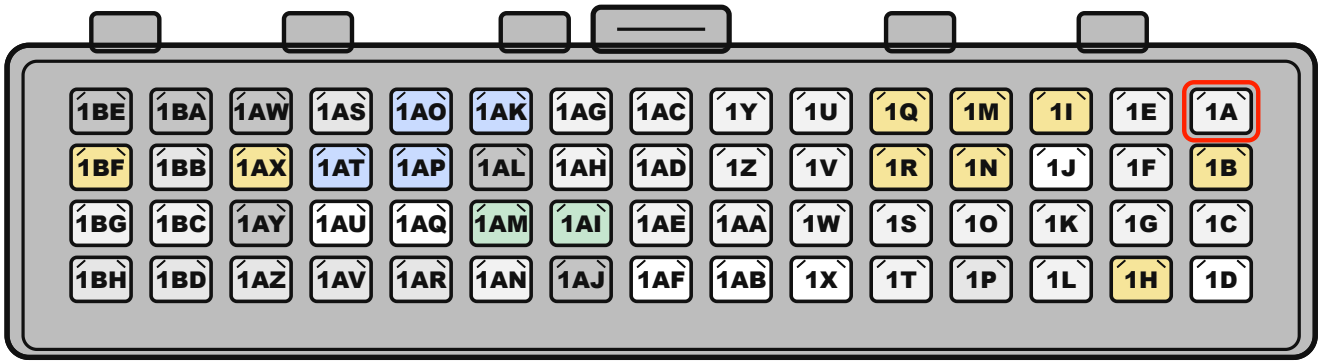
PCM PINOUT · MK3 · NC 1.8 / 2.0

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

2006-2015 · L8 / LF · OBD-II · DBW · CAN | DENSO PCM, L8/LF-18-881 FAMILY · 2 X 60-WAY (120 TERMINALS) · IMMOBILISER VIA CAN · OEM REFLASH ONLY

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 NA AND NB 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 CONFIRMED AGAINST THE FACTORY PCM INSPECTION FIGURE (SM2359942, AMXZZW00002794), WHICH IS CAPTIONED WIRING HARNESS-SIDE CONNECTOR AND CARRIES MAZDA'S WIRE-SIDE VIEW ICON: 120 OF 120 CELLS AGREE, SO NO ROTATION AND NO MIRROR IS APPLIED.

PIN	FUNCTION	WIRE	I/O
1A	NOT USED	-	-
1B	STARTER RELAY CONTROL (M/T) / TR SWITCH (A/T)	W/G	OUT
1C	NOT USED	-	-
1D	CLUTCH PEDAL POSITION SWITCH (M/T ONLY) [M/T ONLY]	V	IN
1E	NOT USED	-	-
1F	NOT USED	-	-
1G	NOT USED	-	-
1H	FUEL-PUMP RELAY CONTROL	R/W	OUT
1I	A/C RELAY CONTROL	BR/Y	OUT
1J	REFRIGERANT PRESSURE SWITCH (MIDDLE)	Y/R	IN
1K	NOT USED	-	-
1L	NOT USED	-	-
1M	COOLING-FAN RELAY NO.1	Y/B	OUT
1N	COOLING-FAN RELAY NO.2	R/W	OUT
1O	NOT USED	-	-

PIN	FUNCTION	WIRE	I/O
1P	MAF SENSOR GROUND	R/G	GND
1Q	MAIN RELAY CONTROL	G/Y	OUT
1R	COOLING-FAN RELAY NO.3	G	OUT
1S	NOT USED	-	-
1T	NOT USED	-	-
1U	NOT USED	-	-
1V	NOT USED	-	-
1W	NOT USED	-	-
1X	NEUTRAL SWITCH (M/T) / TR SWITCH P-N (A/T)	G/W	IN
1Y	NOT USED	-	-
1Z	NOT USED	-	-
1AA	NOT USED	-	-
1AB	BRAKE SWITCH NO.1 SIGNAL	B/Y	IN
1AC	NOT USED	-	-
1AD	NOT USED	-	-

PIN	FUNCTION	WIRE	I/O
1AE	NOT USED	-	-
1AF	BRAKE SWITCH NO.2 SIGNAL (CRUISE / LATE CARS) [CRUISE CARS / LATE VINS]	R/Y	IN
1AG	NOT USED	-	-
1AH	NOT USED	-	-
1AI	HS-CAN LOW	G/B	I/O
1AJ	APP SENSOR NO.2 +5V SUPPLY	R/B	PWR
1AK	MAF SIGNAL	GY/R	IN
1AL	APP SENSOR NO.1 +5V SUPPLY	L/Y	PWR
1AM	HS-CAN HIGH	L/W	I/O
1AN	NOT USED	-	-
1AO	APP SENSOR NO.1 SIGNAL	G/R	IN
1AP	APP SENSOR NO.2 SIGNAL	W	IN
1AQ	CRUISE CONTROL SWITCH (CRUISE CARS)	P/L	IN
1AR	MAF / IAT SENSOR GROUND	R/L	GND
1AS	APP SENSOR NO.1 GROUND	GY	GND

PIN	FUNCTION	WIRE	I/O
1AT	IAT SIGNAL	L/B	IN
1AU	REFRIGERANT PRESSURE SWITCH (HIGH / LOW)	LG/R	IN
1AV	APP SENSOR NO.2 GROUND	BR	GND
1AW	B+ FROM MAIN RELAY	B/L	PWR
1AX	DRIVE-BY-WIRE (ETV) RELAY CONTROL	L	OUT
1AY	IGNITION SWITCH IG FEED	B/W	PWR
1AZ	GROUND	B	GND
1BA	BACK-UP POWER, BATTERY CONSTANT	L/R	PWR
1BB	GROUND	B	GND
1BC	NOT USED	-	-
1BD	GROUND	B	GND
1BE	B+ FROM MAIN RELAY	B/L	PWR
1BF	DRIVE-BY-WIRE (ETV) RELAY CONTROL	W/B	OUT
1BG	NOT USED	-	-
1BH	GROUND	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 table SM2359942 (L8/LF, UK carline), corroborated pin for pin by the Autodata NC 2.0 pin table. Colours from the Mazda UK RHD CONTROL SYSTEM sheets 0140-a to 0140-g, both editions identical, corroborated by Autodata 302619 on all 81 pins it draws. Re-checked 2026-09-10 against five more Mazda books, the European nc-early CONTROL SYSTEM set (WD114377, WD498157, WD498202, WD498249, WD504395), which print the PCM(F) and PCM(EM) faces with a colour or a vacant mark in all 120 cavities: every one of the 82 coloured rows agrees, no row differs, and no cavity the sheet leaves blank is wired on any of them. Those books cover four different European NC carlines, so the colours do not vary by market or VIN band inside the NC. Face CLOSED 2026-09-10 on that document's own figure amxzzw00002794, captioned WIRING HARNESS-SIDE CONNECTOR with Mazda's wire-side view icon: all 120 cells match, 1A and 2A top-right, and Autodata agrees. 1D and 1X are M/T pins; 2E is LF (VVT) only; 1AF is cruise cars and late VINs (README). No donor photo, so the keying is undrawn. FOJI internal reference, corroborated 2026-06. Original FOJI compilation, not reproduced from Mazda artwork.

CONFIDENCE: HIGH

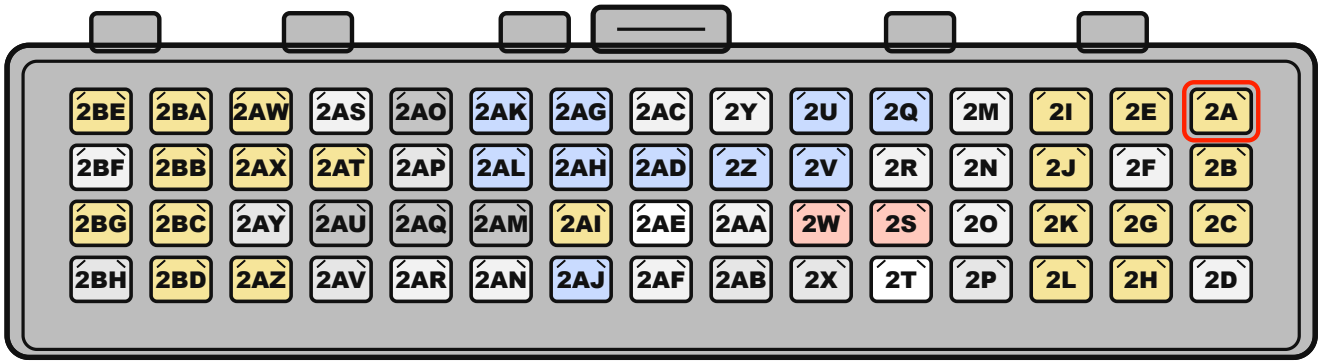
PCM PINOUT · MK3 · NC 1.8 / 2.0

CONNECTOR 2 (PCM(EM), 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

2006-2015 · L8 / LF · OBD-II · DBW · CAN | DENSO PCM, L8/LF-18-881 FAMILY · 2 X 60-WAY (120 TERMINALS) · IMMOBILISER VIA CAN · OEM REFLASH ONLY

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 NA AND NB 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 CONFIRMED AGAINST THE FACTORY PCM INSPECTION FIGURE (SM2359942, AMXZZW00002794), WHICH IS CAPTIONED WIRING HARNESS-SIDE CONNECTOR AND CARRIES MAZDA'S WIRE-SIDE VIEW ICON: 120 OF 120 CELLS AGREE, SO NO ROTATION AND NO MIRROR IS APPLIED.

PIN	FUNCTION	WIRE	I/O
2A	THROTTLE ACTUATOR (+)	B/W	OUT
2B	THROTTLE ACTUATOR (-)	B/R	OUT
2C	PURGE SOLENOID CONTROL	B/LG	OUT
2D	NOT USED	-	-
2E	OIL CONTROL VALVE (VVT, LF ONLY) [LF ONLY]	B/L	OUT
2F	NOT USED	-	-
2G	EGR VALVE COIL #2	R/W	OUT
2H	EGR VALVE COIL #4	G	OUT
2I	VARIABLE TUMBLE SOLENOID	O	OUT
2J	VARIABLE INTAKE AIR SOLENOID	W	OUT
2K	EGR VALVE COIL #1	P/B	OUT
2L	EGR VALVE COIL #3	L/R	OUT
2M	NOT USED	-	-
2N	NOT USED	-	-
2O	NOT USED (FACTORY: WIRED, MARKED NOT USED)	BR/R	-

PIN	FUNCTION	WIRE	I/O
2P	CMP SENSOR GROUND	L/B	GND
2Q	REAL HO2S SIGNAL	R/Y	IN
2R	NOT USED	-	-
2S	CMP SIGNAL	R/B	IN
2T	POWER-STEERING PRESSURE SWITCH	B/O	IN
2U	KNOCK SENSOR (+)	V	IN
2V	KNOCK SENSOR (-)	P	IN
2W	CKP SIGNAL	G/Y	IN
2X	SHIELD-WIRE GROUND (KS / A/F)	B	GND
2Y	NOT USED	-	-
2Z	FRONT A/F SENSOR	W/R	IN
2AA	NOT USED	-	-
2AB	CKP SENSOR GROUND	G/R	GND
2AC	NOT USED	-	-
2AD	FRONT A/F SENSOR	L/R	IN

PIN	FUNCTION	WIRE	I/O
2AE	BACK-UP LIGHT SWITCH (GEAR-SHIFT INDICATOR CARS) [1-SRC, VACANT ON UK DIAGRAM]	-	IN
2AF	NOT USED	-	-
2AG	MAP SIGNAL	L/Y	IN
2AH	ECT SIGNAL	Y	IN
2AI	GENERATOR FIELD COIL CONTROL (TERMINAL D)	BR/W	OUT
2AJ	GENERATOR OUTPUT VOLTAGE (TERMINAL P)	LG/R	IN
2AK	TP SENSOR NO.1	B/G	IN
2AL	TP SENSOR NO.2	BR/B	IN
2AM	CMP SENSOR +5V	LG/B	PWR
2AN	NOT USED	-	-
2AO	TP SENSOR +5V (VREF)	B/Y	PWR
2AP	TP SENSOR GROUND	B/L	GND
2AQ	CKP SENSOR +5V	L/O	PWR
2AR	NOT USED	-	-
2AS	NOT USED	-	-

PIN	FUNCTION	WIRE	I/O
2AT	IGT4 IGNITION COIL CYL 4	GY/R	OUT
2AU	MAP SENSOR +5V (VREF)	Y/G	PWR
2AV	MAP SENSOR GROUND	L	GND
2AW	IGT2 IGNITION COIL CYL 2	R/G	OUT
2AX	IGT3 IGNITION COIL CYL 3	W/L	OUT
2AY	ECT SENSOR GROUND	R/L	GND
2AZ	INJECTOR CYL 4	W/B	OUT
2BA	IGT1 IGNITION COIL CYL 1	Y/B	OUT
2BB	INJECTOR CYL 1	W/G	OUT
2BC	INJECTOR CYL 2	R	OUT
2BD	INJECTOR CYL 3	Y/R	OUT
2BE	REAR HO2S HEATER CONTROL	L/W	OUT
2BF	NOT USED	-	-
2BG	FRONT A/F SENSOR HEATER CONTROL	G/B	OUT
2BH	REAR HO2S GROUND	W/L	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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