Notes:

1. This drawing documents the electrical schematic and wiring installation of a Link G5 Neo-4 Engine Control Unit (ECU) and its associated CANchecked MCE18 v3 I/O expansion unit in my modified 1993 Mazda RX7.

2. This drawing references the 1993 Mazda RX7 Factory Shop Manual (FSM), Section Z Electrical Schematics and is intended to supplement the Mazda FSM.

3. All electrical schematic symbology conventions and wire color codes referenced in the Mazda FSM shall be utilized herein unless otherwise noted.

4. Notes on this sheet apply to all sheets in this drawing. Additional notes specific to the content of each sheet may be added to that sheet as applicable.

5. The OEM Mazda ECU, part # N3A1-18-881A, and the OEM Mazda Emissions (EM) ECU Wiring Harness, part # N3A1-18-05ZG, have been removed and replaced by the Link G5 Neo-4 ECU, CANchecked MCE18 CAN I/O expansion unit and a custom fabricated wiring harness, respectively. This wiring harness shall be designed and constructed to applicable motorsports standards, and relevant Military Standards applicable to ground vehicles.

6. Wire Specifications:

6a. Wire for the CAS and Knock Sensors shall be IAW M27500/20SBT23 (20AWG x2 twisted/shielded pair); Wire for all other conductors used in the Link G5 Neo-4 ECU Wiring Harness shall be IAW M22759/32-20 (20AWG) or M22759/32-18 (18AWG), depending on maximum current draw of the circuit after de-rating.

6b. Wire utilized for all new or modified/upgraded power distribution circuits shall be IAW industry standard SAE-J-1128 for TXL insulated automotive wire.

7. All wires illustrated in this drawing are 18 or 20 AWG, unless specified otherwise in brackets after the wire color designation, e.g., W(12AWG).

8. Firewall bulkhead connector set <J1/P1_MIL> shall be IAW MS3470L22-55S for the firewall side Recepticle (female/sockets), and MS3476L22-55P for the Engine side Plug (male/pins). Refer to sheet 9 for further detail.

9. Main Wiring Harness shall be environmentally sealed with the appropriate diameters of Raychem DR-25 heat shrink tubing, and appropriate size DR-25 heat shrink boots on both sides of <J1/P1_MIL>.

10. Major system and wiring components called out in this schematic are located as follows in the car:

10a. Link G5 Neo-4 ECU and CANchecked MCE18 I/O expansion unit is rigidly mounted in the same right side kick panel location as OEM ECU, on a custom fabricated aluminum mounting plate.

10b. EFI FUSE BLOCK is mounted on the left side spring tower, adjacent to the battery in the engine bay. All terminations at the ECU Fuse Block are ring terminals, sized IAW wire gauge and terminal posts.

10c. The EFI RELAY PANEL and POWER DISTRIBUTION FUSE BLOCK is mounted adjacent to the Link G5 Neo-4 ECU and CANchecked MCE18 I/O Expansion Unit.

10d. IGN-1A Ignition Coils (x4) are mounted in space vacated by the removed OEM Cruise Control Actuator Unit, in the rear, left corner or the engine bay.

10e. The IGN Relay is a NO, SPST environmentally sealed and socketed relay, rated at 40A at 12VDC, mounted on the left spring tower, adjacent to the ignition coils.

11. The OEM fuel pump relay and resistors are no longer used, but physically remain in place unconnected. As indicated in the schematic, the fuel pump (+) circuit side obtains power via new fuel pump relay controlled by the Link G5 Neo-4 ECU. New 10/12AWG wiring and upgraded connectors are used for fuel pump power and ground. OEM connector <B1-06> no longer carries current to the fuel pump, but is retained for the fuel gauge and low fuel indicator warning circuits - Refer to Mazda FSM Section Z for schematics of these circuits.

Notes (Continued):

12. Ground Locations and Details:

12a. Battery (-) terminal is grounded to Engine Block at Starter Motor mounting bolt lug, and to main chassis ground post on the spring tower via separate, parallel wired 4AWG battery cables and copper lugs, respectively. These ground locations are indicated on the schematic by ground symbols annotated as "MAIN GND".

12b. Fuel Pump grounds to the existing OEM rear cabin ground location #12, <JC12>; OEM fuel pump wiring is replaced with new 12AWG ground wire and suitable lug. This ground location is indicated on the schematic by ground symbols annotated as "FP GND".

12c. Grounds for the Link G5 Neo-4 ECU and Relay Panel Assy. connect to chassis ground at the same M6-1.0 threaded hole location utilized by the OEM ECU, via new ground wiring and suitable lugs as indicated in schematic. These ground locations are indicated on the schematic by ground symbols annotated as "ECU GND".

12d. Ref. Sheet #4, "SPARK GND #1 ROTOR" and "SPARK GND #2 ROTOR" denote M8x1.25 threaded holes on top of each rotor housing where IGN-1A Pin C of rotor #1 L1/T1 coil pair and rotor #2 L2/T2 coil pair grounds to their respective rotor housing. Wiring is M22759/32-18 from each coil pair's Pin C to a common 12AWG TXL ground wire via <DT2_SPGND> connector to an M8 lug.

12e. Ground for the Cooling Fans (Ref. Sheet #6) is an M6-1.0 threaded hole located on the lower front frame structure, adjacent to the right spring tower. Grounds are wired with new 12AWG wiring and suitable lugs as annotated in schematic by "FAN_GND".

13. Link G5 Neo-4 ECU integration with the OEM Mazda wiring is through the OEM <X05> and <X14> connectors without modification to wiring on the OEM harness side of these connectors. For integration with OEM Front (F) Harness connector <B1-01>(F), the indicated wires on <B1-01>(F) were depinned and connected to <DTM12_X1000> for connections to the Link G5 Neo-4 ECU. The unused <B1-01> connector and its wires are left in place insulated and secured.

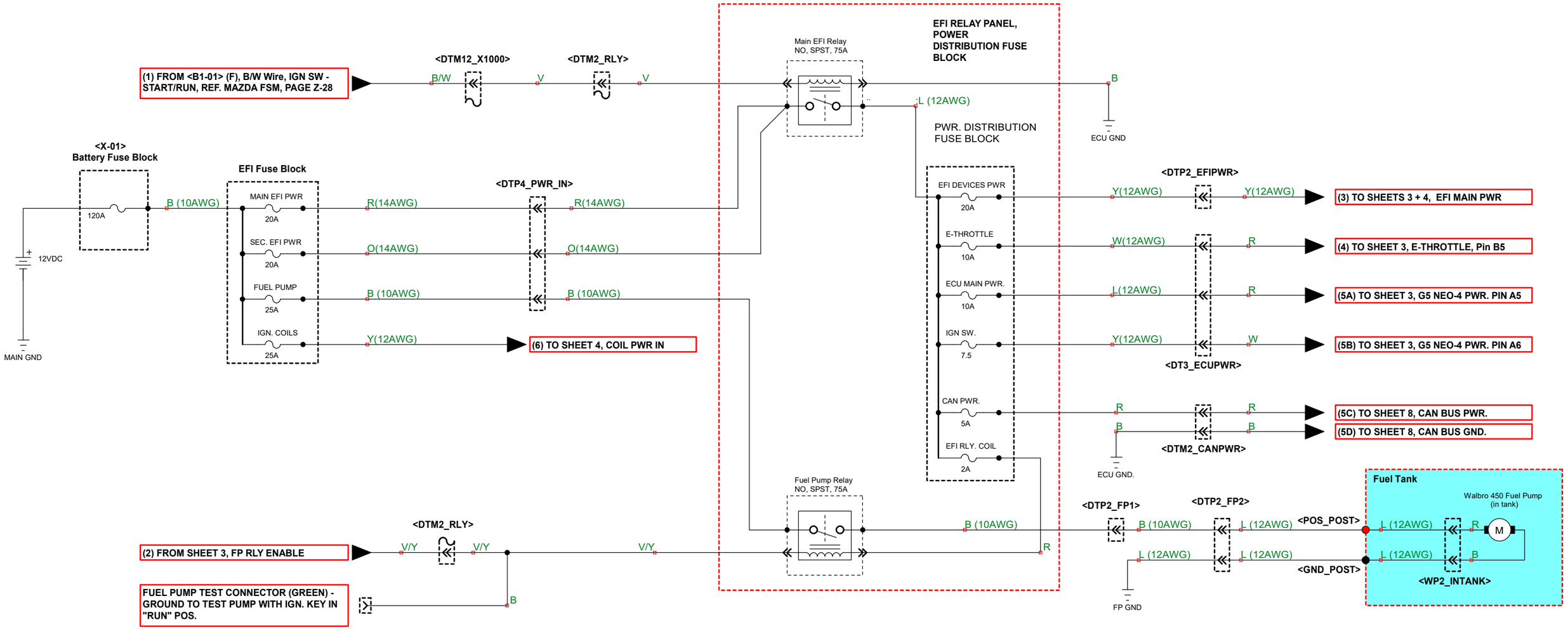
14. In this drawing, any symbols denoted by <B_SPLICE> indicate an inline closed barrel butt splice was used in the harness. These are used to transition from one AWG wire gauge to another (e.g., 12AWG to 18AWG) , or for connecting multiple wires together in a branch circuit. All such splices are insulated and environmentally sealed with Raychem DR25 or equivalent heat shrink tubing.

15. The GPS antenna provided with the Link G5 Neo-4 is mounted on the upper center rear hatch glass, on the interior side of the glass, using the provided double-sided adhesive pad, with Link logo facing the sky per Link instructions. The antenna cable is routed through the headliner, to the right side B-pillar and down to the door sill, where it routes forward to the kick panel area for connection to the Link G5 Neo-4 via connector <SMA1_GPS>. Excess GPS antenna cable is coiled and zip-tied securely and hidden in the kick panel area.

Drawing Revisions History:

Version 0.0 - None, initial drawing release on 12 December 2025

Title: Link G5 ECU Wiring Installation Schematic, 1993 Mazda RX7		
Author: Peter W. Morel Subtitle: Drawing Notes and Revision Tracking Sheet		
File: C:\Users\Peter ... FD Schematic-Neo4-Rev0.dsn		Document: FD3S-002
Revision: 0.0	Date: 12 December 2025	Sheets: 1 of 12



Notes:

1. Power input for the EFI Fuse Block is tapped at the 120A fused main battery power available at <X-01>, Battery Fuse Block. This connection is terminated with a ring terminal lug, on M6-1.0 bolt on <X-01>. No other OEM circuits on the <X-01> fuse block have been modified or tapped for power; for clarity, only the one power tap connection to the new EFI Fuse Block is shown.

2. The Main EFI and Fuel Pump relays are identical panel mount relays, NO, SPST contacts rated at 75A continuous duty at 12VDC. Relay coil terminations are 1/4 inch female spade crimp terminals, sized IAW wire gauges used. Relay Input/Output Power contact terminals are #10 screw post types, terminated with ring terminals IAW screw post size and wire gauges utilized.

3. The PWR. DISTRO. FUSE BLOCK terminations are all screw post terminals. Wiring is connected via ring terminals sized IAW with screw post diameter and wire gauge specifications utilized.

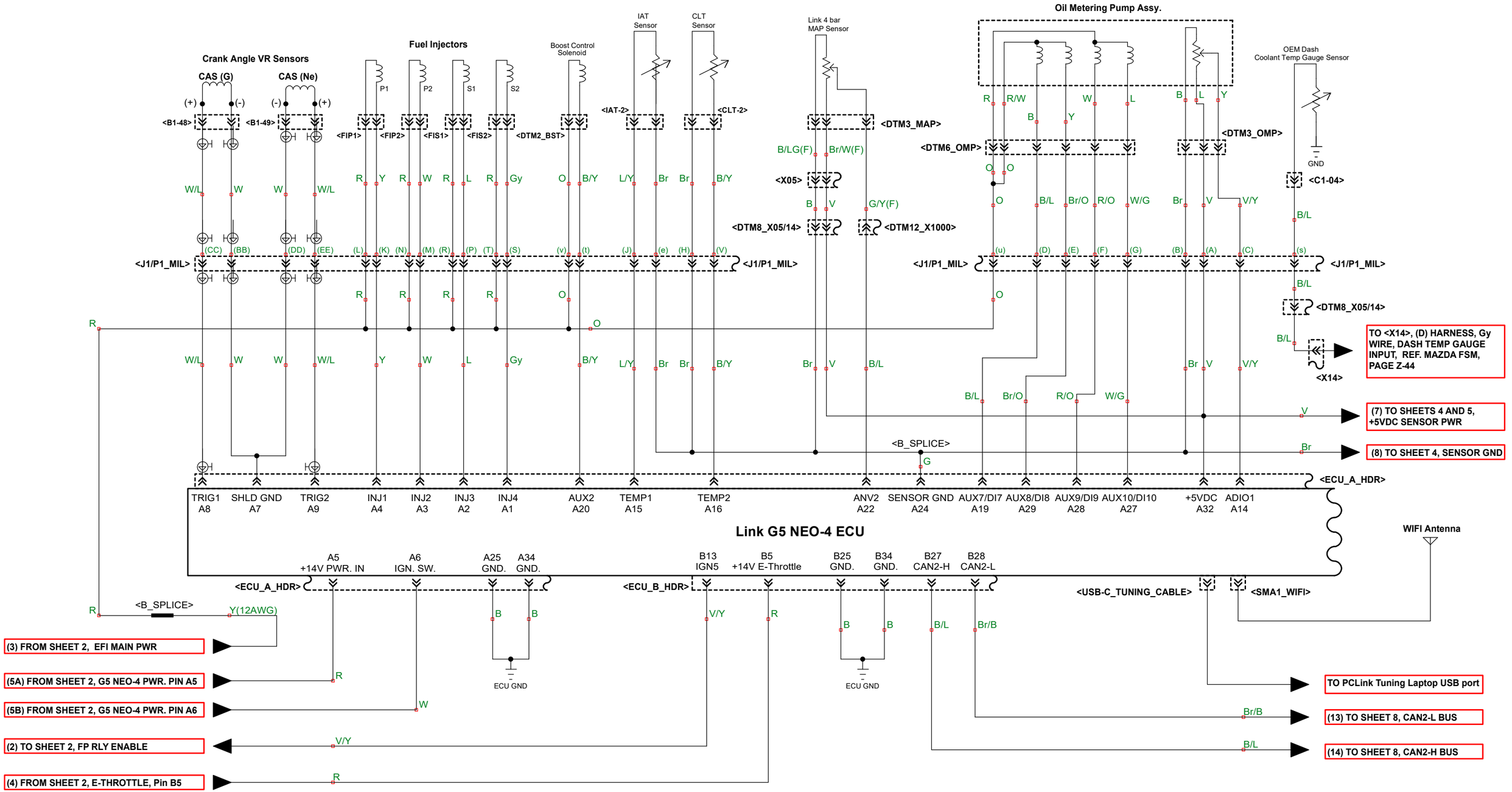
4. The FUEL PUMP TEST JUMPER is located adjacent to the Link G5 Neo-4 ECU; it is hidden behind the glove compartment but is easily accessed without removing any trim pieces. Connecting this jumper to ground with the ignition key on will run the fuel pump, to test the fuel system for leaks during service operations.

5. The FP GND is located at the rear cabin ground location #12, <JC12> ground connector. Connection is made via lug terminal and M6-1.0 bolt at <JC12> chassis ground.

6. The 2x 12AWG wires passing through the fuel tank bulkhead terminate on each end with ring terminals on M6x1.0 stainless steel posts, which are electrically isolated from the tank hanger in PTFE isolator bushings and O-rings, to prevent fuel vapor escape. Positive terminal insulator denoted as <POS_POST> is RED, Ground terminal insulator denoted as <GND_POST> is BLACK. All wiring and connectors exposed to fuel are rated for permanent submerged fuel usage. This includes the <WP2_INTANK> connector, and the 12AWG M22759/16-12 Tefzel insulated wire.

7. Reference Sheet 4 for IGN relay wiring.

Title: Link G5 ECU Wiring Installation Schematic, 1993 Mazda RX7		
Author: Peter W. Morel Subtitle: ECU Power Distribution & Fuel Pump Circuits		
File: C:\Users\Peter ... FD Schematic-Neo4-Rev0.dsn		Document: FD3S-002
Revision: 0.0	Date: 12 December 2025	Sheets: 2 of 12



Notes:

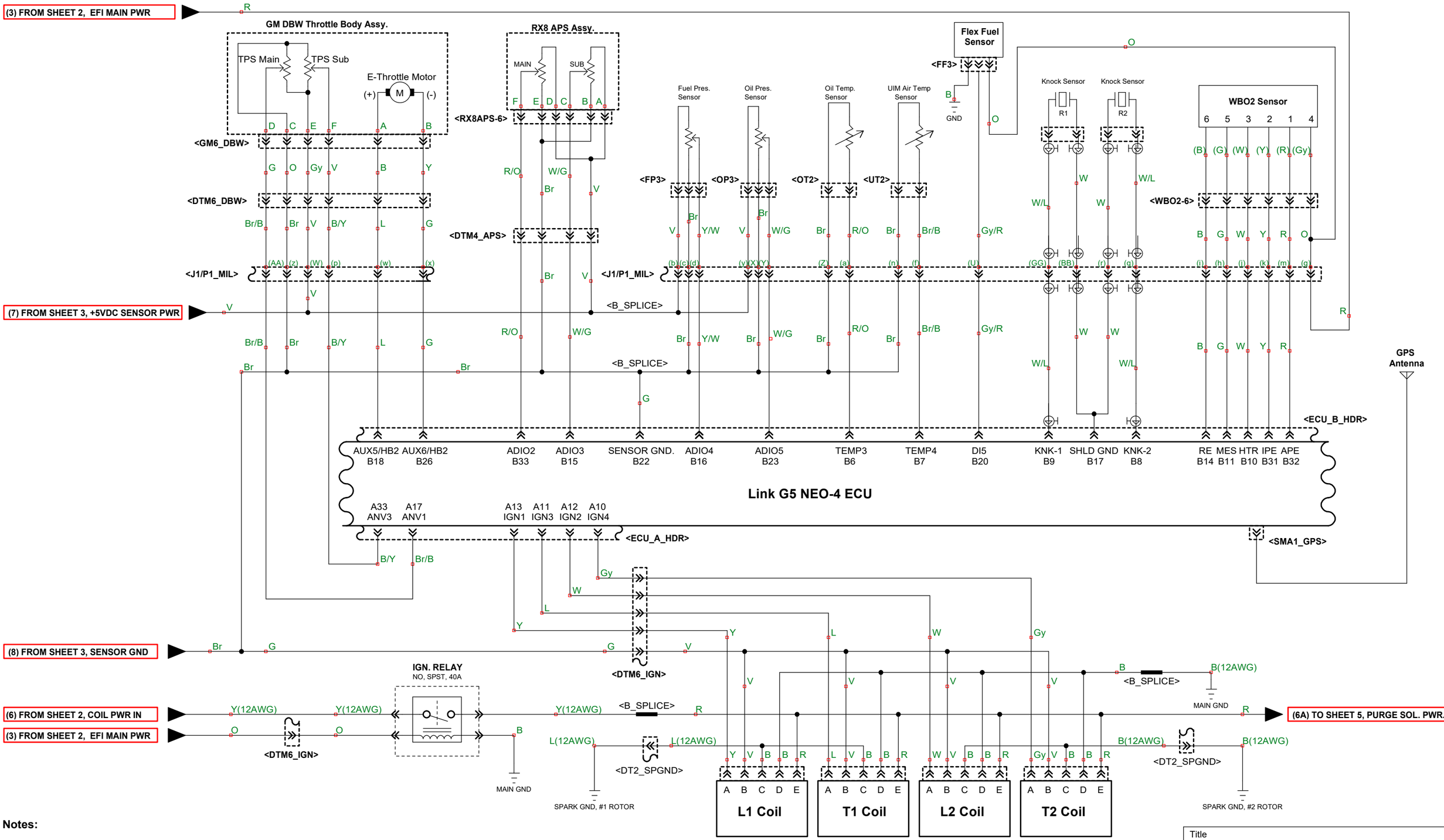
1. Pin numbers for <J1/P1_MIL> connector are indicated by bracketed characters adjacent to its terminals. Pin arrangement and nomenclature for <J1/P1_MIL> is IAW MS3470L22-55S and MS3476L22-55P item drawings. Note that upper case letters I, O and Q, and lower case letters l, and o are not used IAW the specification.

2. Terminal (HH) of <J1/P1_MIL> is not shown in the schematic. This pin is utilized as a common pass-through termination for the shield conductors of the CAS and Knock sensor's shielded cables. Shield conductors, and the negative (-) conductor (white wire) of the CAS sensors all connect to the common SHLD GND, pin A7.

3. Link G5 Neo-4 terminal designations and pin numbers are labeled IAW Link G5 Neo-4 documentation. Example: "INJ4", "A1" designates the Injector #4 output on header/pin # A1.

4. The WiFi antenna shown screws directly into the Link G5 Neo-4 without any additional cable via the <SMA1_WIFI> connector.

Title: Link G5 ECU Wiring Installation Schematic, 1993 Mazda RX7		
Author: Peter W. Morel Subtitle: ECU, Sensors & Output Devices, 1 of 3		
File: C:\Users\Peter ... FD Schematic-Neo4-Rev0.dsn		Document: FD3S-002
Revision: 0.0	Date: 12 December 2025	Sheets: 3 of 12



Notes:

1. Ground wire and lug for the Flex Fuel Sensor connects to the engine block via an M8-1.25 threaded hole, front rotor housing.

2. Terminal (HH) of <J1/P1_MIL> is not shown in the schematic. This pin is utilized as a common pass-through termination for the shield conductors of the CAS and Knock sensor's shielded cables. Shield conductors, and the negative (-) conductor (white wire) of the Knock sensors all connect to the common SHLD GND, pin B17.

Title: Link G5 ECU Wiring Installation Schematic, 1993 Mazda RX7		
Author: Peter W. Morel Subtitle: ECU, Ignition Coils, Sensors & Output Devices, 2 of 3		
File: C:\Users\Peter ... FD Schematic-Neo4-Rev0.dsn		Document: FC3S-002
Revision: 0.0	Date: 12 December 2025	Sheets: 4 of 12

(8) FROM SHEET 3, SENSOR GND

(7) FROM SHEET 3, +5VDC SENSOR PWR

<DT2_RES>

1K Ohm

<DTM4_CRUISE>

(9) FROM SHEET 7, ALL CRUISE/BRAKE SW. GND/RTNS

(10) FROM SHEET 7, CRUISE CNTRL. SW. INPUTS

(11) FROM SHEET 7, BRAKE SWITCH INPUT

<DTM6_SP_I/O>

AUX12 SPARE OUTPUT

AUX11 SPARE OUTPUT

INJ7 SPARE OUTPUT

IGN6 SPARE OUTPUT

TO <X05>(F), G/B WIRE, E-FAN RLYS #2 and #4, REF. MAZDA FSM, PAGE Z-30

<X05>

<DTM8_X05/14>

<DTM2_DIODES>

<DTM12_X1000>

FROM <B1-01> (F), V WIRE, A/C ON INPUT, REF. MAZDA FSM, PAGE Z-34

TO <B1-01> (F), Y/B WIRE, A/C RLY. OUT, REF. MAZDA FSM, PAGE Z-34

(12) TO PURGE VALVE, VIA Br WIRE IN OEM (F) HARNESS TO B1-09(F). REF. PURGE WIRING DETAIL"A"

FROM <B1-01> (F), B/R WIRE. IGN. SW, START INPUT, REF. MAZDA FSM, PAGE Z-34

TO <B1-01> (F), Y/L WIRE, TACH INPUT, REF. MAZDA FSM, PAGE Z-30

FROM <B1-01> (F), L/O WIRE, CLUTCH SW. INPUT, REF. MAZDA FSM, PAGE Z-34

FROM <B1-01> (F), G/R WIRE, SPEEDO SIGNAL, REF. MAZDA FSM, PAGE Z-34

<ECU_B_HDR>

INJ6 B3 | DI6 B19 | INJ8 B1 | ADIO6 B24 | DI4 B21 | AUX12 B29 | AUX11 B30 | INJ7 B2 | IGN6 B13 | INJ5 B4

Link G5 NEO-4 ECU

A18 AUX3/HB1 | A23 DI3 | A21 AUX1 | A31 DI2 | A30 DI1 | A26 AUX4/HB1

<ECU_A_HDR>

<DTM6_SP_I/O>

W/G

AUX4/HB1 SPARE OUTPUT

TO <X05>(F), G/W WIRE, NEUTRAL SW. REF. MAZDA FSM, PAGE Z-34

<X05>

<B1-50>

Neutral SW

<F3-07>

Reverse SW

<DTM6_TRANS>

<DTM8_TRANS>

Speedometer Sensor (VSS)

<C1-08>

<DTM8_X05/14>

<X14>

TO <X14>(D), L/G WIRE, E-FAN RLY #3 INPUT, REF. MAZDA FSM, PAGE Z-42

TO <X14>(D), B WIRE, NEUTRAL SW. REF. MAZDA FSM, PAGE Z-34

TO <X14>(D), R WIRE, REVERSE SW. REF. MAZDA FSM, PAGE Z-66

TO <X14>(D), B/Y WIRE, REVERSE SW. REF. MAZDA FSM, PAGE Z-66

TO <X14>(D), Y/R WIRE, SPEEDOMETER SENSOR, REF. MAZDA FSM, PAGE Z-44

TO <X14>(D), Y/W WIRE, SPEEDOMETER SENSOR, REF. MAZDA FSM, PAGE Z-44

Notes:

1. The single diode symbol on this sheet represents ten (10) 1N4007 diodes wired in series, which connect to the harness with polarity as shown via DTM connector <DTM2_DIODES>.

2. The 1K Ohm pull up resistor connected to ADIO6 is wired into the harness via connector <DT2_RES> so it can be shunted or replaced if necessary. The 1 to 2 splice of the corresponding V/G wire is made at the closed-barrel crimp pin on <DTM4_CRUISE>.

3. The currently unused I/O pins from the Link G5 Neo-4 ECU are brought out to the <DTM8_SP_I/O> connector for potential future use.

4. Ref. PURGE VALVE WIRING DETAIL "A". the Red "X" symbols denote a Cut Wire Modification. OEM connector <B1-09>(F) is for reference only; <B1-09> and the OEM Ignitor was removed as it is replaced with with IGN-1A coils. Purge solenoid obtains switched +12VDC power from the IGN Relay. The B wire for the purge solenoid connect to the OEM wiring using uninsulated closed barrel butt crimps, insulated with Raychem DR-25 heat shrink tubing.

5. Due to the removal of the OEM Emissions Harness, the pass-thru wiring for OEM connectors <B1-50>, <F3-07> and <C1-08> is provided to retain OEM functions (i.e., Speedometer, Reverse lights, Starter Interlock)

PURGE VALVE WIRING DETAIL "A"

(12) FROM <DTM12_X1000>, Br WIRE, OEM (F) HARNESS TO B1-09(F), REF. MAZDA FSM, PAGE Z-28

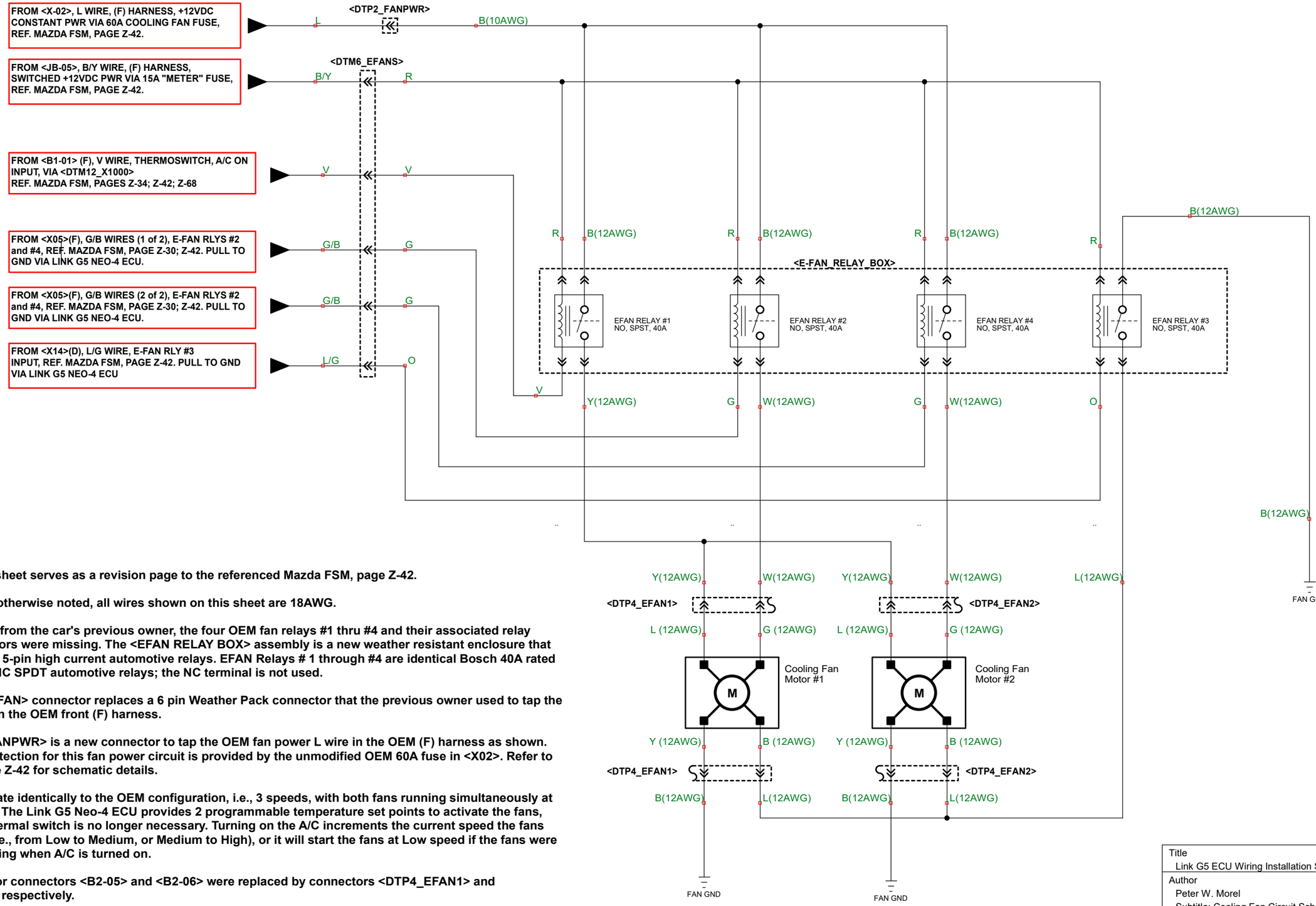
<B1-09>(F)

(6A) FROM SHEET 4, PURGE SOL. PWR.

<PURGE_2>

Purge Solenoid

Title: Link G5 ECU Wiring Installation Schematic, 1993 Mazda RX7		
Author: Peter W. Morel Subtitle: ECU, OEM Systems/Sensors Integration, 3 of 3		
File: C:\Users\Peter ... FD Schematic-Neo4-Rev0.dsn		Document: FD3S-002
Revision: 0.0	Date: 12 December 2025	Sheets: 5 of 12



Notes:

1. This drawing sheet serves as a revision page to the referenced Mazda FSM, page Z-42.

2. Unless noted otherwise noted, all wires shown on this sheet are 18AWG.

3. As purchased from the car's previous owner, the four OEM fan relays #1 thru #4 and their associated relay sockets/connectors were missing. The <EFAN RELAY BOX> assembly is a new weather resistant enclosure that houses up to six 5-pin high current automotive relays. EFAN Relays # 1 through #4 are identical Bosch 40A rated SPDT 5-pin NO/NC SPDT automotive relays; the NC terminal is not used.

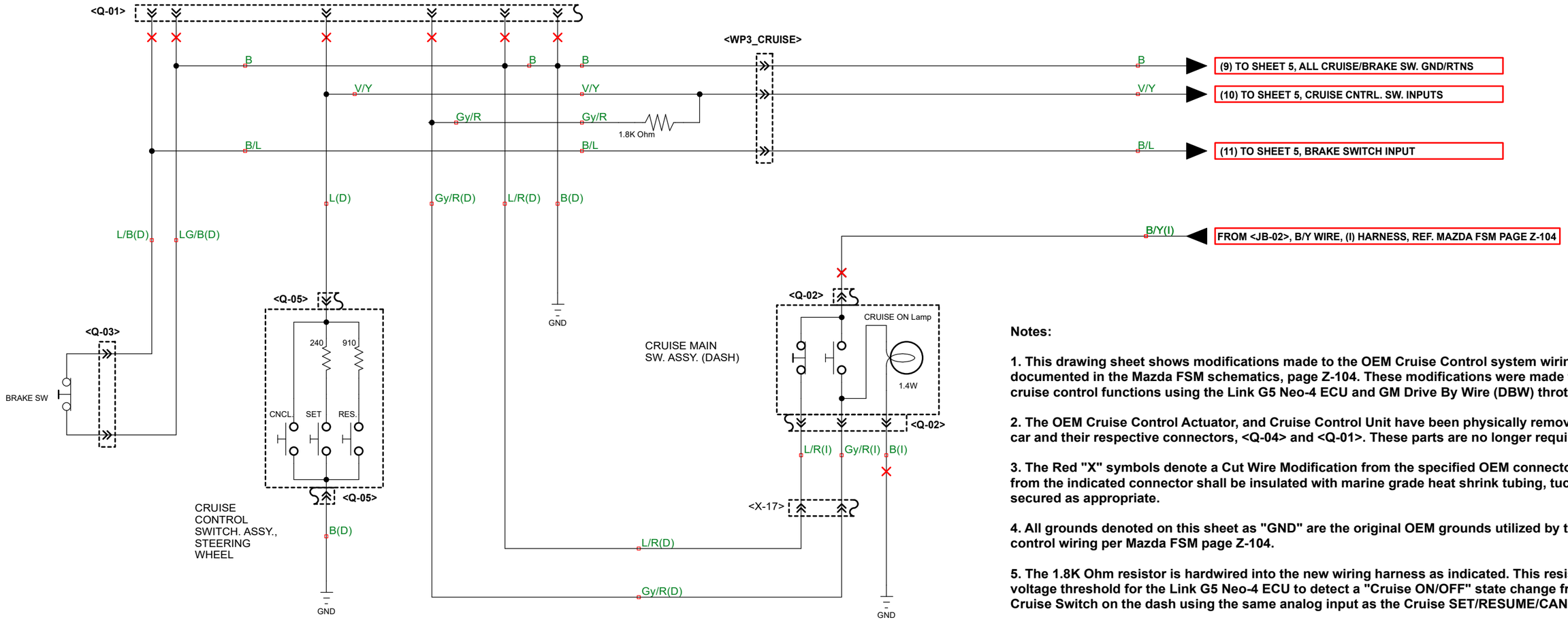
4. The <DTM6_EFAN> connector replaces a 6 pin Weather Pack connector that the previous owner used to tap the indicated wires in the OEM front (F) harness.

5. The <DTP2_FANPWR> is a new connector to tap the OEM fan power L wire in the OEM (F) harness as shown. Over current protection for this fan power circuit is provided by the unmodified OEM 60A fuse in <X02>. Refer to Mazda FSM page Z-42 for schematic details.

6. The fans operate identically to the OEM configuration, i.e., 3 speeds, with both fans running simultaneously at the same speed. The Link G5 Neo-4 ECU provides 2 programmable temperature set points to activate the fans, thus the OEM thermal switch is no longer necessary. Turning on the A/C increments the current speed the fans are running at (i.e., from Low to Medium, or Medium to High), or it will start the fans at Low speed if the fans were not already running when A/C is turned on.

7. OEM fan motor connectors <B2-05> and <B2-06> were replaced by connectors <DTP4_EFAN1> and <DTP4_EFAN2>, respectively.

Title: Link G5 ECU Wiring Installation Schematic, 1993 Mazda RX7		
Author: Peter W. Morel Subtitle: Cooling Fan Circuit Schematic		
File: C:\Users\Peter ... FD Schematic-Neo4-Rev0.dsn		Document: FD3S-002
Revision: 0.0	Date: 12 December 2025	Sheets: 6 of 12



Notes:

1. This drawing sheet shows modifications made to the OEM Cruise Control system wiring as documented in the Mazda FSM schematics, page Z-104. These modifications were made to support cruise control functions using the Link G5 Neo-4 ECU and GM Drive By Wire (DBW) throttle body.

2. The OEM Cruise Control Actuator, and Cruise Control Unit have been physically removed from the car and their respective connectors, <Q-04> and <Q-01>. These parts are no longer required.

3. The Red "X" symbols denote a Cut Wire Modification from the specified OEM connector. Cut ends from the indicated connector shall be insulated with marine grade heat shrink tubing, tucked and secured as appropriate.

4. All grounds denoted on this sheet as "GND" are the original OEM grounds utilized by the cruise control wiring per Mazda FSM page Z-104.

5. The 1.8K Ohm resistor is hardwired into the new wiring harness as indicated. This resistor sets the voltage threshold for the Link G5 Neo-4 ECU to detect a "Cruise ON/OFF" state change from the Main Cruise Switch on the dash using the same analog input as the Cruise SET/RESUME/CANCEL switch.

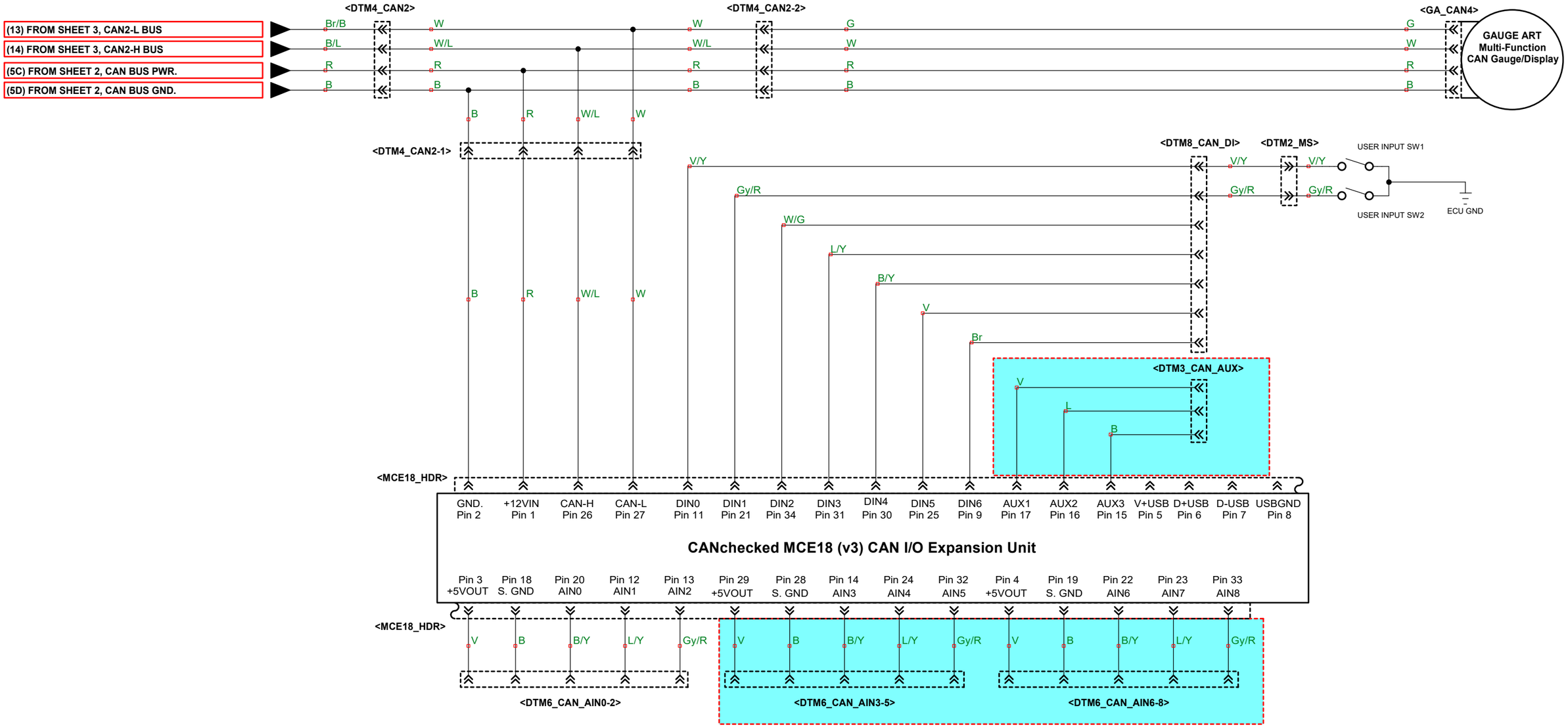
6. Not shown on this sheet is the OEM Clutch Switch input to the Link G5 Neo-4 ECU; refer to sheet 5 of this drawing package for that detail. In addition to the Brake Sw. input, the Link G5 software utilizes the Clutch Sw. input to cancel cruise if either the brake or clutch pedal is depressed.

7. Cruise Control operational functionality as implemented with the Link G5 Neo-4 ECU is identical to OEM functionality, with the following exceptions:

7a. Indicator lamp on the CRUISE MAIN switch no longer illuminates to indicate when cruise is enabled.

7b. Pressing EITHER the "Cruise On" or "Cruise Off" switches on the Cruise Main switch toggles the "Cruise Enable/Disable" functions in the Link G5 Neo-4 ECU. This is due to the mechanical design of the switch (i.e., pressing either button switches both poles simultaneously), and the design of the Link G5 cruise control software.

Title: Link G5 ECU Wiring Installation Schematic, 1993 Mazda RX7		
Author: Peter W. Morel Subtitle: Modifications to the OEM Cruise Control Schematic		
File: C:\Users\Peter ... FD Schematic-Neo4-Rev0.dsn		Document: FD3S-002
Revision: 0.0	Date: 12 December 2025	Sheets: 7 of 12



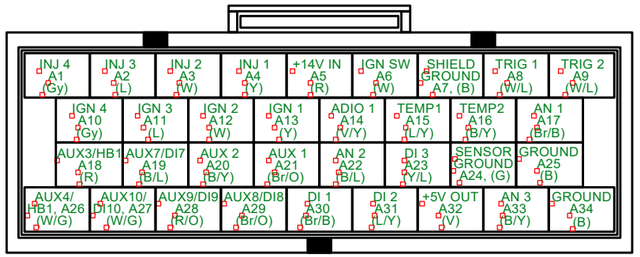
Notes:

1. The CANchecked MCE18 CAN I/O Expansion Unit enables the Link G5 Neo-4 ECU to support up to 9 additional Analog Inputs, 7 additional Digital Inputs, and 3 additional AUX Outputs via CAN bus interface. Currently only 2 Digital Inputs are used to support User Input Switches #1 and #2, and 3 Analog Inputs, #0 thru 2, will be assigned to support 2x EGT sensors and 1x EMAP sensor. The relevant EGT and EMAP sensors and associated wiring beyond the <DTM6_CAN_AIN0-2> connector will be incorporated in a future revision to this drawing.

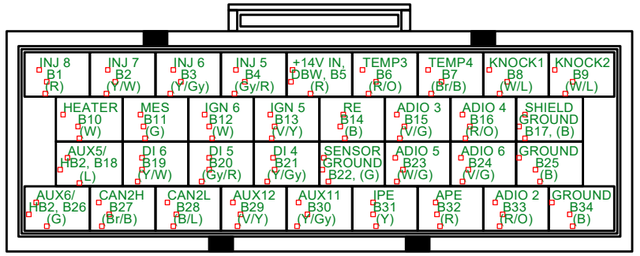
2. The connectors and associated wiring highlighted in the cyan boxes have not been physically wired to the CANchecked MCE18 yet, because there are no current plans to utilize these additional I/O ports. However these connector pigtails were fabricated, and only need to be pinned to the <MCE18_HDR> connector to be included as shown.

Title: Link G5 ECU Wiring Installation Schematic, 1993 Mazda RX7		
Author: Peter W. Morel Subtitle: MCE18 I/O Expansion Unit & CAN Bus Wiring		
File: C:\Users\Peter ... FD Schematic-Neo4-Rev0.dsn		Document: FD3S-002
Revision: 0.0	Date: 12 December 2025	Sheets: 8 of 12

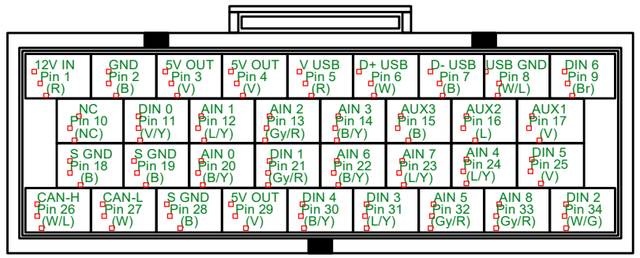
<ECU_A_HDR>



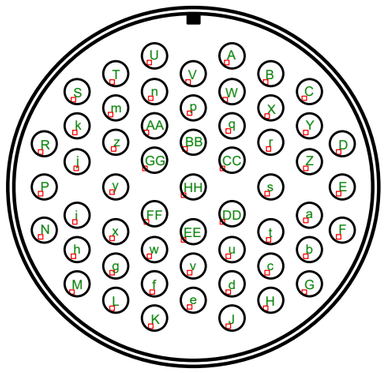
<ECU_B_HDR>



<MCE18_HDR>



<J1/P1_MIL>



Notes:

1. Diagram convention: All wire colors and terminal designations for connectors are shown as they are viewed from the wiring harness side of the connector shell, unless noted otherwise. "NC" denotes "No Connection".

2. Connector identification nomentclature: <XXX#_TEXT> The 2 or 3 character "XXX" code denotes the series of connector used; "#" represents the number of conductors, and "TEXT" denotes an abbreviated description of the connector's function in the circuit. Examples follow:

2a. <DTM#_TEXT> = Deutsch DT-Miniature series; Example: <DTM6_IGN> denotes a 6 pin DTM connector in the Ignition sub-harness.

2b. <DTP#_TEXT> = Deutsch DT-Power series; Example: <DTP4_PWR_IN> denotes a 4 pin DTP connector in the power distribution sub-harness.

2b. <DT#_TEXT> = Deutsch DT-Standard series; Example: <DT3_PWR_IN> denotes a 3 pin DT connector in the power distribution sub-harness.

2d. <WP#_TEXT> = Weather Pack connector; Example: <WP3_CRUISE> denotes a 3 pin Weatherpack connector in the Cruise Control sub-harness.

2e. Connectors unique to the device they connect to are denoted as follows: <NAME-#>, where "NAME" denotes the device; "#" denotes the number of conductors. Example: <RX8APS-6> denotes the RX8 Accellerator Pedal Sensor 6 pin connector.

3. All OEM Mazda connectors shown in this drawing are referenced IAW the same nomenclature designations used in the Mazda FSM, Section Z, Schematic Diagrams, e.g., <X14>, <B1-01>.

4. Connector gender identification nomenclature: All male connectors are identified by a (P) for Plug following the connector name, e.g., <DTM6_OMP>, (P). All female connectors are identified by a (R) for Recepticle following the connector name, e.g., <DTM6_OMP>, (R).

5. All two pin connectors that are not connected to polarized devices are intentionally omitted from this diagram. This includes all fuel injectors, 2 terminal temperature sensors, and solenoids. Refer to the schematic diagram for wire colors on these connectors; schematic provides sufficient information for electrical testing and troubleshooting of these circuits.

6. The <ECU_A_HDR>, <ECU_B_HDR>, and <MCE18_HDR> connectors specified for the Link G5 Neo-4 ECU and CANchecked MCE18, respectively, are AMP Super Seal 1.0 Series, 34 way connectors, and all are female recepticles. The only salient difference is in the keying, as shown on this drawing by the filled-in black rectangles, and differentiated by part dash numbers. Replacement connector backshell part numbers are as follows: <ECU_A_HDR> and <MCE18_HDR> = TE Connectivity #4-1437290-0; <ECU_B_HDR> = TE Connectivity #4-1437290-1.

7. Replacement female terminals for <ECU_A_HDR>, <ECU_B_HDR> and <MCE18_HDR> are the same. For 18AWG wire applications, use TE Connectivity part #3-1447221-3. For 20AWG wire applications, use TE Connectivity part #3-1447221-4.

8. Pin designations and wire colors for the <ECU_A_HDR>, <ECU_B_HDR> and <MCE18_HDR> are viewed from the wire side of the harness (or into the Link G5 Neo-4 or MCE18 units),

10. Wire colors for the <ECU_A_HDR>, <ECU_B_HDR> and <MCE18_HDR> terminals are identified in brackets, following the terminal identification and pin number. Example: INJ 4, A1, (Gy) identifies a Gray wire on the Injector #4 Output, A1 terminal.

11. The <J1/P1_MIL> designates a 55 way MIL SPEC firewall bulkhead connector pair. The engine compartment side of this pair is a plug, IAW specification MS3476L22-55P, and the firewall bulkhead side is a recepticle, IAW specification MS3470L22-55S.

12. Pin/socket arrangement and identification nomenclature for <J1/P1_MIL> is schematically illustrated on this drawing for service and installation purposes, it is not an exact scale representation of the item configuration. Scale drawings and specifications of the connector items are IAW MS3470L22-55S and MS3476L22-55P item drawings. Note that upper case letters I, O and Q, and lower case letters l, and o are not used IAW this specification.

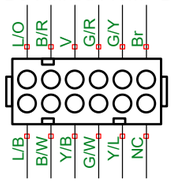
13. The filled in black rectangle in the <J1/P1_MIL> drawing schematically represents the keying utilized.

14. Replacement terminals for <J1/P1_MIL> shall be IAW specifications M39029/4-110, male pins for the plug side, and M39029/5-115, female sockets for the recepticle side. These terminals are commonly referred to as size 20 pins or sockets, and they accept wire gauges from 18AWG to 20AWG, when using M22759/32 Tefzel insulated wire.

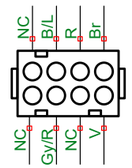
15. Specialized tooling is required to insert and remove pins/sockets from <J1/P1_MIL>. A suitable low cost plastic tool made IAW military specification M81969/14-02 is readily available from multiple sources. Note however that this plastic tool is not durable and is considered disposable, thus re-pinning all terminals on <J1/P1_MIL> typically consumes at least 5 of these tools.

Title: Link G5 ECU Wiring Installation Schematic, 1993 Mazda RX7		
Author: Peter W. Morel Subtitle: Connector Diagrams, Sheet 1 of 4		
File: C:\Users\Peter ... FD Schematic-Neo4-Rev0.dsn		Document: FD3S-002
Revision: 0.0	Date: 12 December 2025	Sheets: 9 of 12

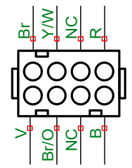
<DTM12_X1000>, (R)
OEM (F) Harness Side,
Wires De-Pinned From <B1-01>(F)



<DTM8_X05/14>, (R)
Link G5 Neo-4 ECU Harness Side



<DTM8_TRANS>, (P)
Connects to <DTM6_TRANS>(R)

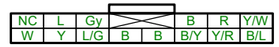


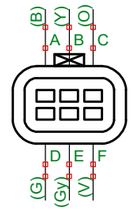
<X05>, (P)
Link G5 Neo-4 ECU Harness Side

<X05>, (R)
OEM (F) Harness Side

<X14>, (P)
Link G5 Neo-4 ECU Harness Side

<X14>, (R)
OEM (D) Harness Side



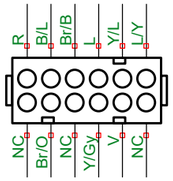


<GM6_DBW>, (R)
Pigtail Assembly, Connects to
<DTM6_DBW>, (P)

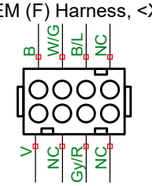
Note:

Replacement <GM6_DBW> pigtail assembly wire colors as indicated; connect terminals A to F to <DTM6_DBW> (P) as indicated.

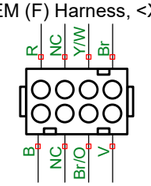
<DTM12_X1000>, (P)
Link G5 Neo-4 ECU Harness Side



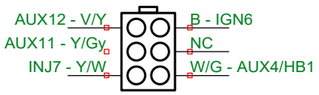
<DTM8_X05/14>, (P)
Wires to OEM (D) Harness, <X14>(P)
and OEM (F) Harness, <X05>(P)



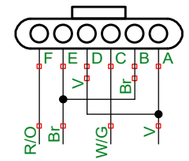
<DTM8_TRANS>, (R)
Wires to OEM (D) Harness, <X14>(P)
and OEM (F) Harness, <X05>(P)



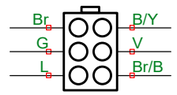
<DTM6_SP_IO>, (R)
Link G5 Neo-4 ECU Harness Side



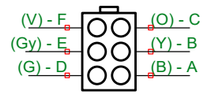
<RX8APS-6>, (R) Connector
Wires from <DTM4_APS> (P)



<DTM6_DBW>, (R)
Link G5 Neo-4 Harness Side



<DTM6_DBW>, (P)
Connects to <GM6_DBW> Pigtail
Wires/Terminals as indicated



<DTM6_IGN>, (R)
Link G5 Neo-4 ECU Harness Side

<DTM6_IGN>, (R)
IGN Harness Side, to IGN-1A Coils

<DTM6_TRANS>, (R)
Connects to <DTM8_TRANS>,(P)

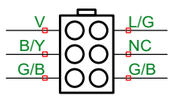
<DTM6_TRANS>, (P)
Wires to OEM Connectors
<B1-50; <F3-07; <C1-08>

<DTM4_APS>, (R)
Link G5 Neo-4 ECU Harness Side

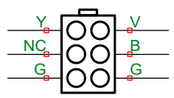
<DTM2_DIODES>, (R)
Link G5 Neo-4 Harness Side

<DT2_RES>, (R)
Link G5 Neo-4 Harness Side

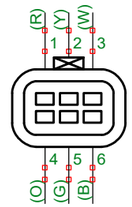
<DTM6_EFANS>, (R)
OEM (F) Harness Side



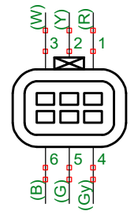
<DTM6_EFANS>, (P)
Pigtail from E-Fan Relay Box



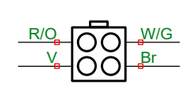
<WBO2-6>, (R)
Link G5 Neo-4 ECU Harness Side



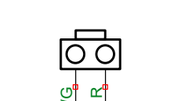
<WBO2-6>, (P)
LSU 4.9 WBO2 Sensor Connector



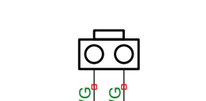
<DTM4_APS>, (P)
Wires to <RX8APS-6> (R)



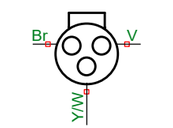
<DTM2_DIODES>, (P)
Diode Pack Side



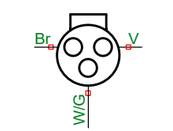
<DT2_RES>, (P)
Pull Up Resistor Side



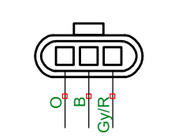
<FP-3>, (R)
Fuel Pressure Sensor Connector



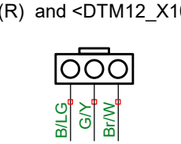
<OP-3>, (R)
Oil Pressure Sensor Connector



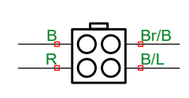
<FF-3>, (R)
Flex Fuel Sensor Connector



<DTM3_MAP>, (R)
Wires from OEM (F) Harness,
<X05> (R) and <DTM12_X1000> (R)

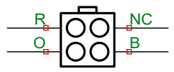


<DTM4_CAN2>, (R)
Link G5 Neo-4 ECU Harness Side

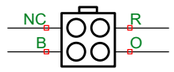


Title: Link G5 ECU Wiring Installation Schematic, 1993 Mazda RX7		
Author: Peter W. Morel Subtitle: Connector Diagrams, Sheet 2 of 4		
File: C:\Users\Peter ... FD Schematic-Neo4-Rev0.dsn		Document: FD3S-002
Revision: 5.0	Date: 12 December 2025	Sheets: 10 of 12

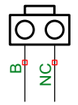
<DTP4_PWR_IN>, (R)
Power Harness Wires from
EFI Fuse Block in Engine Bay



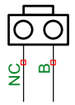
<DTP4_PWR_IN>, (P)
Power Input Pigtail,
Relayl/Fuse Box Assy.



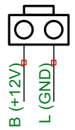
<DTP2_FP1>, (R)
Fuel Pump Power Out Pigtail,
from Relay Panel Assy.



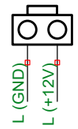
<DTP2_FP1>, (P)
to Fuel Pump Connector,
<DTP2_FP2, (R)>



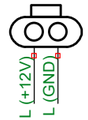
<DTP2_FP2>, (R)
Power from <DTP2_FP1>, (P);
Ground from <JC12>



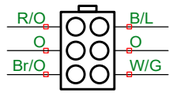
<DTP2_FP2>, (P)
Power/GND Wires to Fuel Tank
Bulkhead Pass-Thru Posts (+/-)



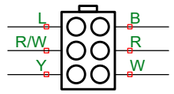
<WP2_INTANK>, (R)
Power/GND Wires from Fuel Tank
Bulkhead Pass-Thru Posts (+/-)



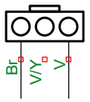
<DTM6_OMP>, (R)
Link G5 Neo-4 Harness Side



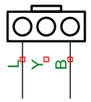
<DTM6_OMP>, (P)
OMP Pigtail, 6 Pin Connector



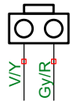
<DTM3_OMP>, (R)
Link G5 Neo-4 Harness Side



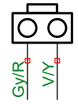
<DTM3_OMP>, (P)
OMP Pigtail, 3 Pin Connector



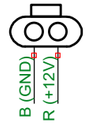
<DTM2_MS>, (R)
Connects to <DTM8_CAN_DI>, (P)
User Input Mode Sw. Sub-Harness



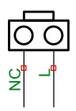
<DTM2_MS>, (P)
Connects to User Input Sw. 1 and 2,
User Input Mode Sw. Sub-Harness



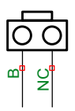
<WP2_INTANK>, (P)
Power/GND Wire Pigtail,
to Walbro 450 Fuel Pump



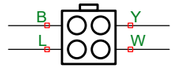
<DTP2_FANPWR>, (R)
60A Fused PWR IN to E-Fan Relay
Box, from OEM (F) Harness



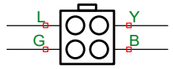
<DTP2_FANPWR>, (P)
E-Fan Relay Box PWR IN Pigtail



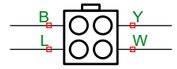
<DTP4_EFAN1>, (R)
Cable from EFAN Relay Box



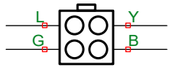
<DTP4_EFAN1>, (P)
Pigtail to E-Fan Motor 1



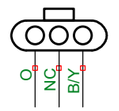
<DTP4_EFAN2>, (R)
Cable from EFAN Relay Box



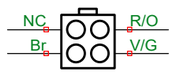
<DTP4_EFAN2>, (P)
Pigtail to E-Fan Motor 2



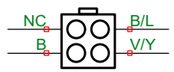
<WP3_BST>, (R)
Boost Solenoid Connector



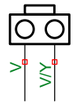
<DTM4_CRUISE>, (P)
Link G5 Neo-4 Harness Side



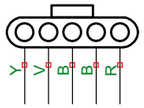
<DTM4_CRUISE>, (R)
Wires to <WP3_CRUISE>, (R)



<DTM2_RLY>, (R)
Link G5 Neo-4 Harness Side



<WP5_L1>, (R)
IGN-1A Coil, Leading #1 Rotor



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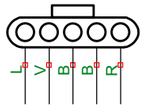
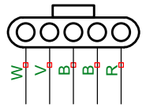
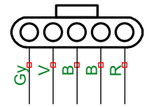
IGN-1A Coil, Trailing #1 Rotor



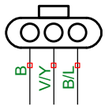
<WP5_L2>, (R)
IGN-1A Coil, Leading #2 Rotor



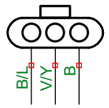
<WP5_T2>, (R)
IGN-1A Coil, Trailing #2 Rotor



<WP3_CRUISE>, (P)
Wires to OEM <Q-01> Connector



<WP3_CRUISE>, (R)
Wires from <DTM4_CRUISE>, (R)



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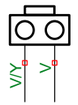
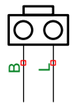
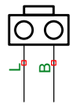
Relay Panel Pigtail Side



<DT2_SPGND>, (P)
IGN Coil Harness Side



<DT2_SPGND>, (R)
Engine Side



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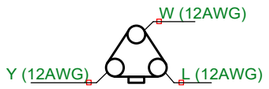
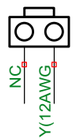
Author Peter W. Morel Subtitle: Connector Diagrams, Sheet 3 of 4		
File C:\Users\Peter ... FD Schematic-Neo4-Rev0.dsn		Document FD3S-002
Revision 0.0	Date 12 December 2025	Sheets 11 of 12

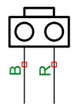
<DT3_ECUPWR>, (R)
PWR. DISTRO. Fuse Box Pigtail



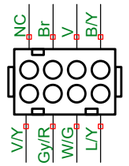
<DTP2_EFIPWR>, (R)
PWR DISTRO Fuse Box Pigtail



<DTM2_CANPWR>, (R)
PWR DISTRO Fuse Box Pigtail



<DTM8_CAN_DI>, (R)
CANchecked MCE18 Side



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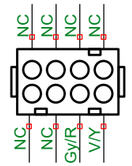
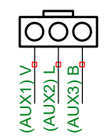
To <DTM2_MS>(R)



<DTM3_CAN_AUX>(R)
CANchecked MCE18 Side



<DT3_ECUPWR>, (P)
Link G5 Neo-4 Harness Side

<DTP2_EFIPWR>, (P)
Link G5 Neo-4 Harness Side

<DTM2_CANPWR>, (P)
Link G5 Neo-4 Harness Side,
To <DTM4_CAN2>, (R)

<DTM6_CAN_AIN0-2>(R)
CANchecked MCE18 Side

<DTM6_CAN_AIN3-5>(R)
CANchecked MCE18 Side

<DTM6_CAN_AIN6-8>(R)
CANchecked MCE18 Side

<DTM4_CAN2>, (P)
CAN2 Bus Splitter Y-Cable

<DTM4_CAN2-1>, (P)
CANchecked MCE18 Side

<DTM4_CAN2-1>, (R)
Y-Cable Leg to CANchecked MCE18

<DTM4_CAN2-2>, (R)
Y-Cable Leg to GaugeArt Gauge

<DTM4_CAN2-2>, (P)
GaugeArt CAN Gauge Side

Title Link G5 ECU Wiring Installation Schematic, 1993 Mazda RX7		
Author Peter W. Morel Subtitle: Connector Diagrams, Sheet 4 of 4		
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