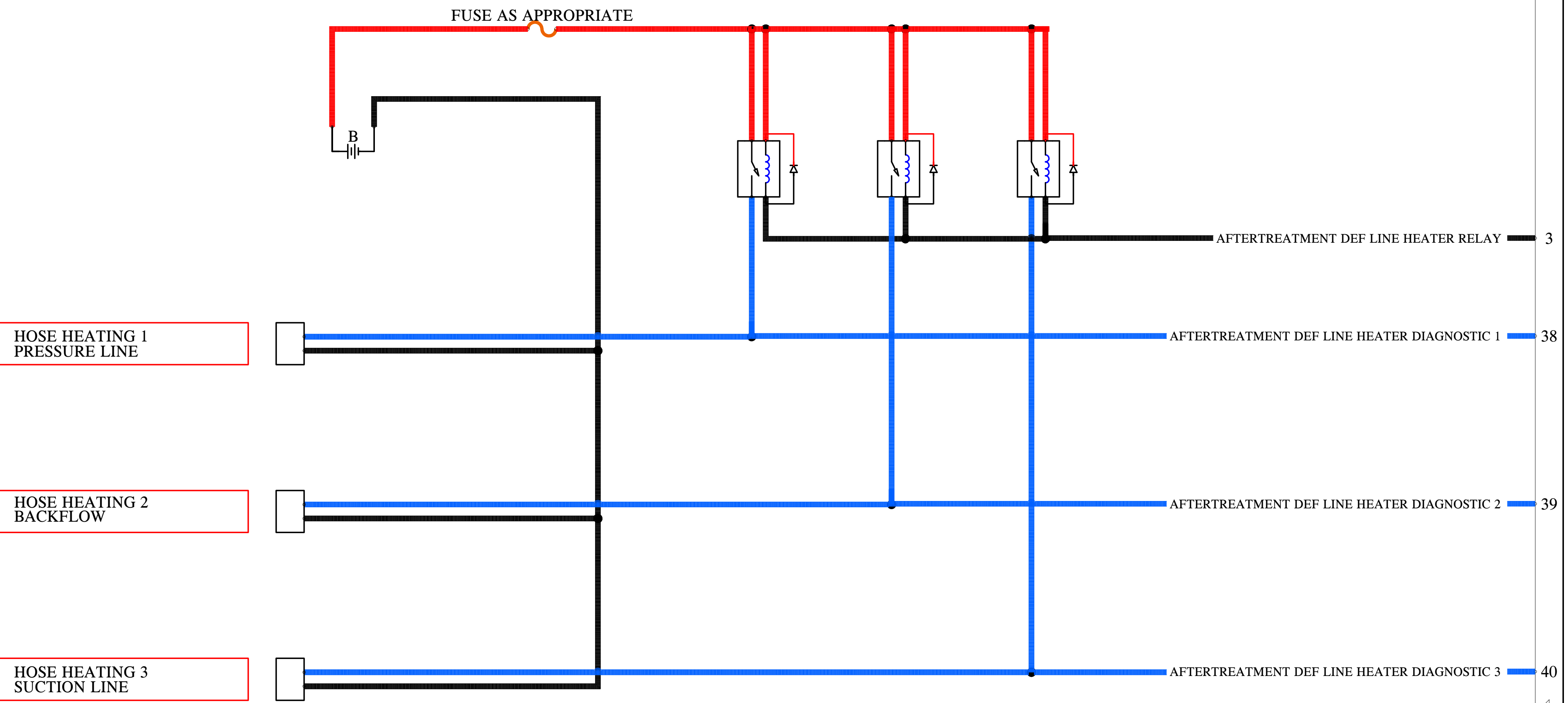
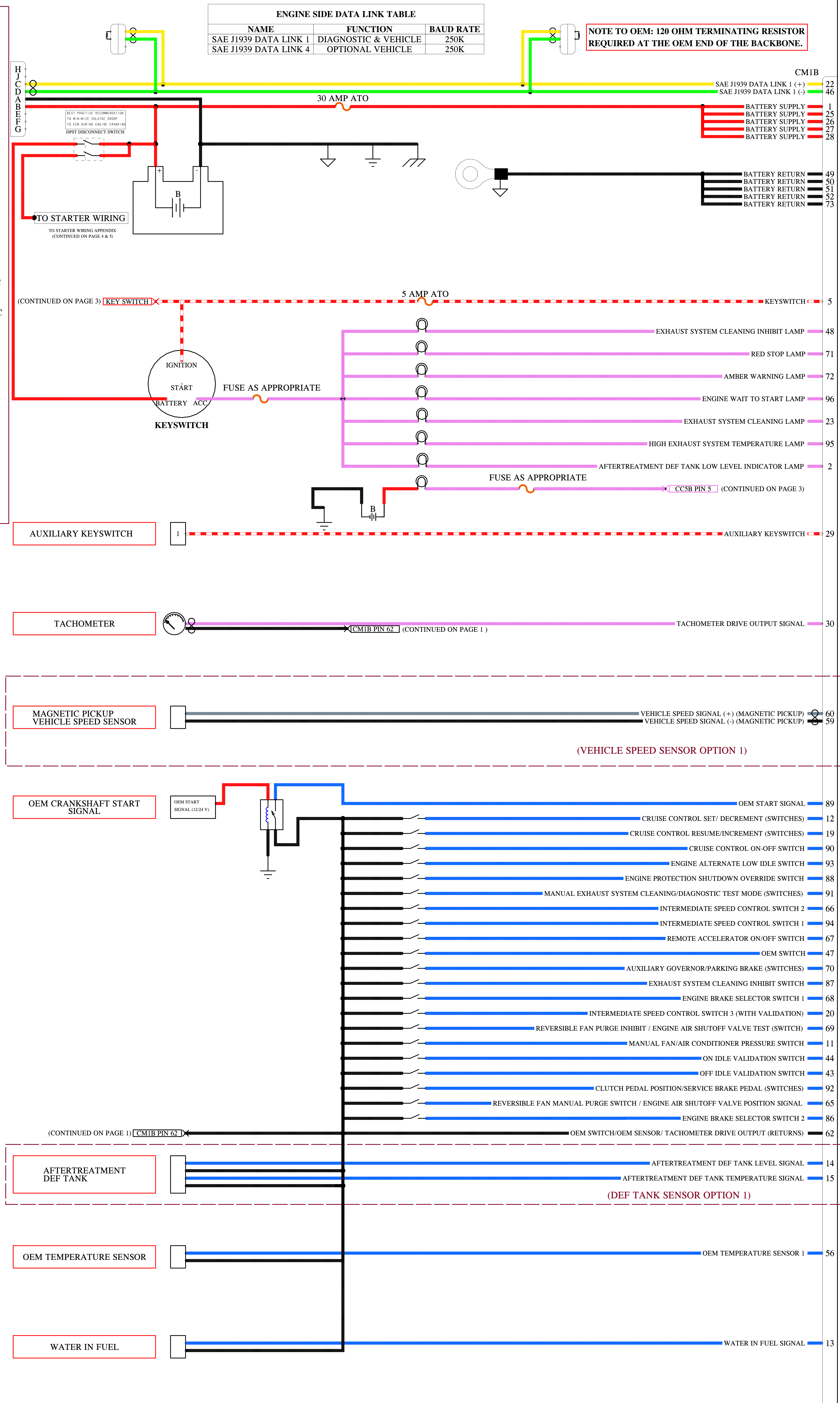
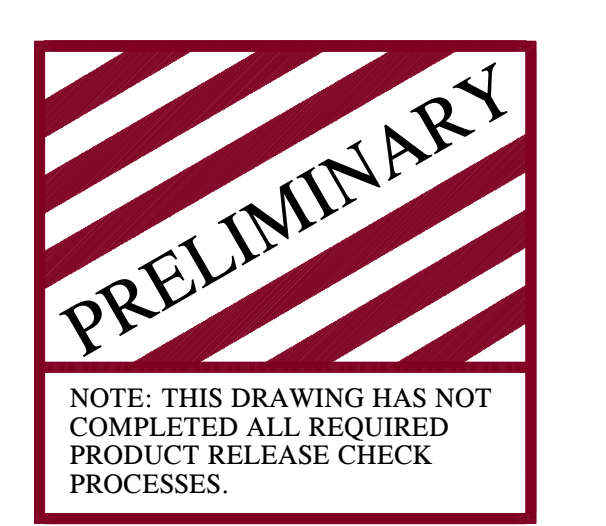


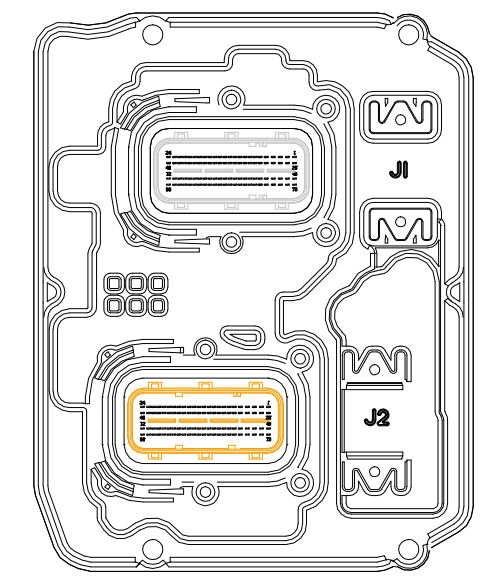
- ALL CONNECTIONS ON THE CM1B CONNECTOR (OEM SIDE) ARE ONLY INTENDED TO GIVE A GENERAL IDEA. TO GET ACCESS TO THE MOST UP TO DATE OEM INTERFACE REFER TO THE CEB 00515.
- CUMMINS REQUIRES WIRING A SUPPRESSION DIODE ACROSS THE RELAY COIL IF THE RELAY DOES NOT CONTAIN AN INTEGRAL SUPPRESSION DIODE. THIS APPLIES TO ALL RELAYS USED IN THE SYSTEM.
- NOTE ABOUT CEB 00514 - INDUSTRIAL STAGE V AFTERTREATMENT ELECTRONIC PACKAGE AND CEB 00515 - CM2350 LEAD FREE ELECTRONIC TECHNICAL PACKAGE- MIDRANGE AND HEAVY DUTY INDUSTRIAL ELECTRONIC SUBSYSTEM STAGE V
- BEST PRACTICE RECOMMENDATION TO MINIMIZE VOLTAGE DROP TO ECM DURING ENGINE CRANKING VOLTAGE AT ECM SHALL NOT DROP BELOW 6V
- FOR ADDITIONAL INFORMATION REGARDING TWISTED PAIR/ TRIPLETS, REFER TO CEB 00515.
- CEB'S CAN BE FOUND AT: <https://gce.cummins.com>

ENGINE SIDE DATA LINK TABLE		
NAME	FUNCTION	BAUD RATE
SAE J1939 DATA LINK 1	DIAGNOSTIC & VEHICLE	250K
SAE J1939 DATA LINK 4	OPTIONAL VEHICLE	250K

NOTE TO OEM: 120 OHM TERMINATING RESISTOR REQUIRED AT THE OEM END OF THE BACKBONE.



CM2350A



J1-GRAY
J2-BROWN

CM1B	DELPHI	13964572
CONNECTOR	DELPHI	13964572
ALT CONNECTOR	NONE	NONE
TERMINAL PLATING	DELPHI	AG
TPA/WEDGE	DELPHI	15494608
CAVITY PLUG	DELPHI	15318164
CONNECTOR	DELPHI	13964572
ALT CONNECTOR	NONE	NONE
TERMINAL PLATING	DELPHI	AG
TPA/WEDGE	DELPHI	15494608
CAVITY PLUG	DELPHI	15318164

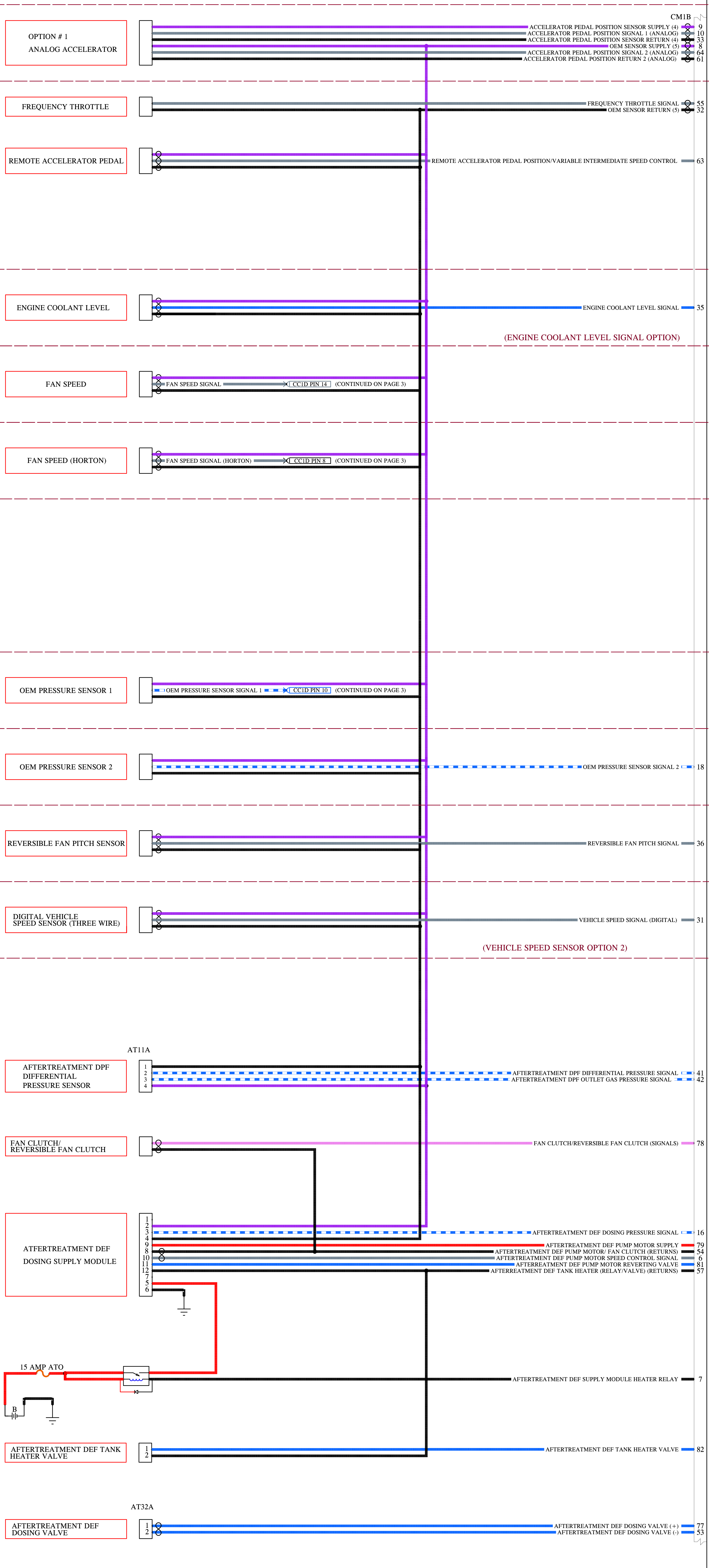
ENGINEERING STANDARD:	CES 10903	RELEASE NUMBER:	
ENGINEERING STANDARD:	FEP 00048356	I/O MATRIX:	CM2350 PV IO MATRIX REVISION 21
INSPECTION STANDARD:	FEP 00048355	DRAFTER:	Komal Pingale
WIRE COLOR STANDARD:	FEP 00046857	CHECKER:	Deepthi Uppala
INDUSTRY STANDARD:	SAE J1939-15 SECTION 5.2.2	DESIGN APPROVAL:	Tushar Varma

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SIZE	ITEM NAME:	DIAGRAM, WIRING
J	IDENTIFIER:	WIRING DIAGRAM
	CODE IDENT NO:	-
	ITEM NUMBER:	4369464
	REVISION:	3
	SHEET	1 OF 6

- ALL CONNECTIONS ON THE CM1B CONNECTOR (OEM SIDE) ARE ONLY INTENDED TO GIVE A GENERAL IDEA. TO GET ACCESS TO THE MOST UP TO DATE OEM INTERFACE REFER TO THE CEB 00515.
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PRELIMINARY
NOTE: THIS DRAWING HAS NOT COMPLETED ALL REQUIRED PRODUCT RELEASE CHECK PROCESSES.

Legend:

- (GROUND SIGNAL)
- (BATTERY SIGNAL)
- (SENSOR SIGNAL)
- (SPEED/POSITION SIGNAL)
- (SWITCHED BATTERY)
- (OUTPUT SIGNAL)
- (PRESSURE SIGNAL)
- (1939 +)
- (1939 -)
- (SENSOR SUPPLY)
- (BATTERY)
- (SIGNAL GROUND)
- (CHASSIS GROUND)
- (BATTERY GROUND)

12 AND 24 VOLT ENGINES

AT11A		
CONNECTOR	FRAMATOME	F715600
ALT CONNECTOR	NONE	NONE
TERMINAL PLATING	FRAMATOME	AU
TPA/WEDGE	NONE	NONE
PART NUMBER		4383998

12 VOLT ENGINES

AT6A		
CONNECTOR	TYCO	1-1703639-1
ALT CONNECTOR	NONE	NONE
TERMINAL PLATING	TYCO	AU
TPA/WEDGE	NONE	NONE
PART NUMBER		4387304

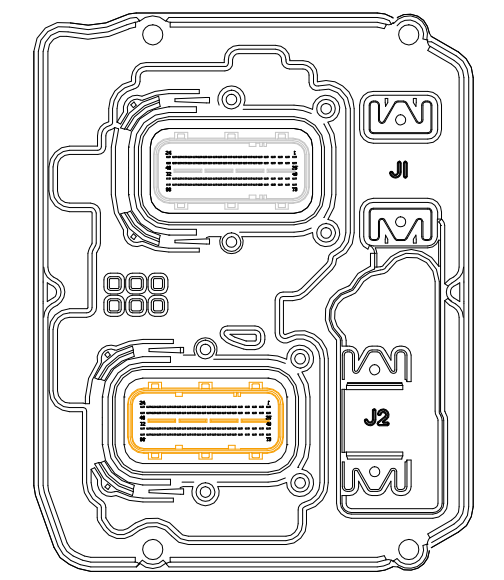
24 VOLT ENGINES

AT6B		
CONNECTOR	TYCO	2-1703639-1
ALT CONNECTOR	NONE	NONE
TERMINAL PLATING	TYCO	AU
TPA/WEDGE	NONE	NONE
PART NUMBER		4387305

12 AND 24 VOLT ENGINES

AT32A		
CONNECTOR	BOSCH	1-928405-522
ALT CONNECTOR	NONE	NONE
TERMINAL PLATING	TYCO	AU
TPA/WEDGE	NONE	NONE
PART NUMBER		4394644

CM2350A



J1-GRAY
J2-BROWN

CM1B		
CONNECTOR	DELPHI	13964572
ALT CONNECTOR	NONE	NONE
TERMINAL PLATING	DELPHI	AG
TPA/WEDGE	DELPHI	15494608
CAVITY PLUG	DELPHI	15318164
CONNECTOR	DELPHI	13964572
ALT CONNECTOR	NONE	NONE
TERMINAL PLATING	DELPHI	AG
TPA/WEDGE	DELPHI	15494608
CAVITY PLUG	DELPHI	15318164

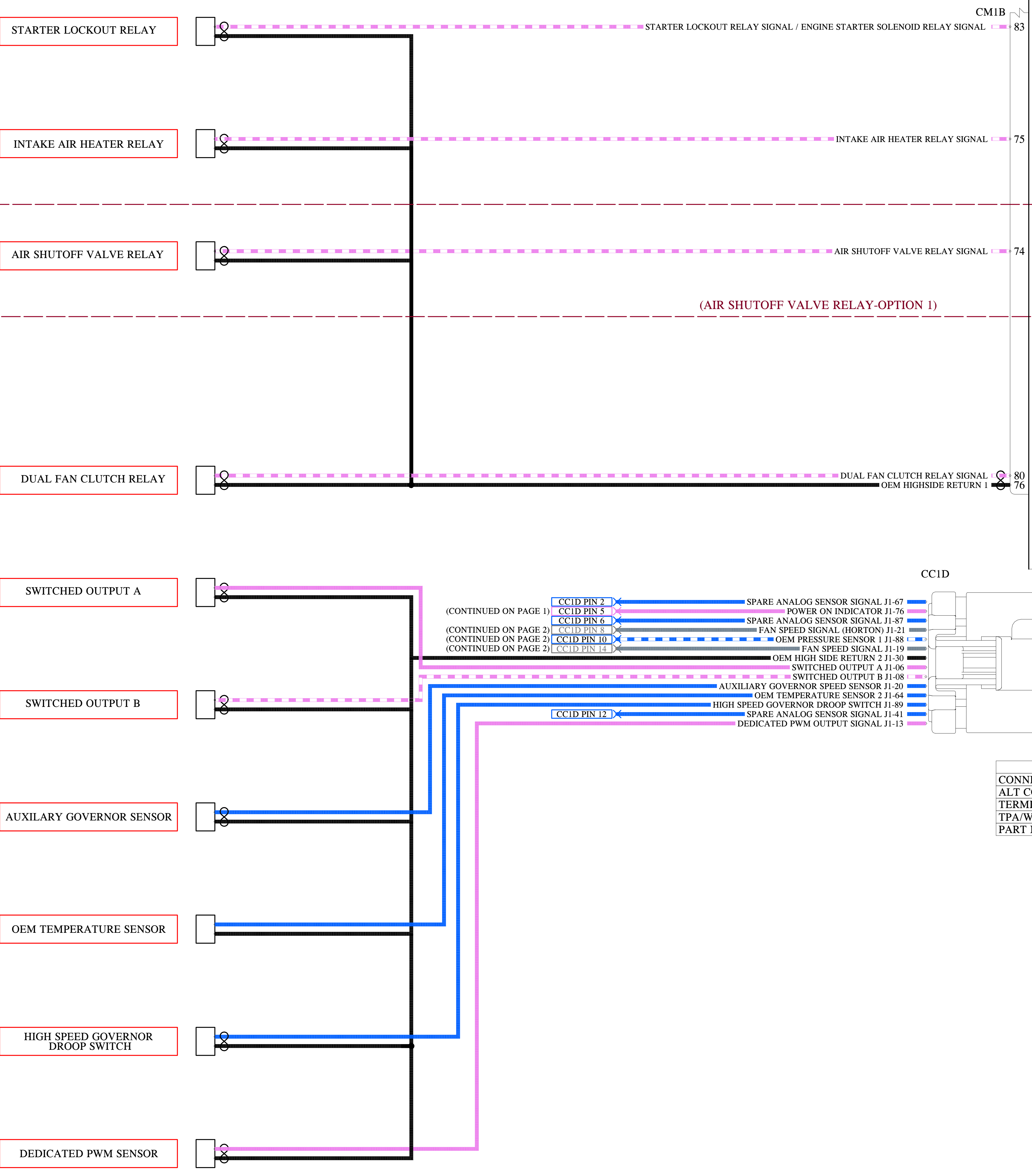
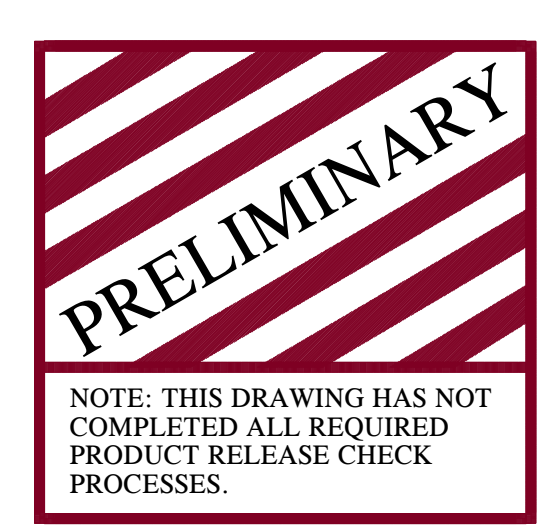
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ENGINEERING STANDARD:	FEP 00048356	I/O MATRIX:	CM2350 PV IO MATRIX REVISION 21
INSPECTION STANDARD:	FEP 00048355	DRAFTER:	Komal Pingale
WIRE COLOR STANDARD:	FEP 00046857	CHECKER:	Deepthi Uppala
INDUSTRY STANDARD:	SAE J1939-15 SECTION 5.2.2	DESIGN APPROVAL:	Tushar Varma

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SIZE		ITEM NAME:	
J		DIAGRAM, WIRING	
IDENTIFIER:		WIRING DIAGRAM	
CODE IDENT NO:	-	ITEM NUMBER:	4369464
REVISION:	3	SHEET	2 OF 6

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<https://gce.cummins.com>



CC8D	DEUTSCH	DT06-4S-CE05
CONNECTOR	NONE	NONE
ALT CONNECTOR	TYCO	AU
TERMINAL PLATING	TYCO	W4P

12 & 24 VOLT ENGINES

AT9A	TYCO	4-1418390-1
CONNECTOR	NONE	NONE
ALT CONNECTOR	TYCO	AU
TERMINAL PLATING	NONE	NONE
TPA/WEDGE	NONE	NONE
PART NUMBER		4384576

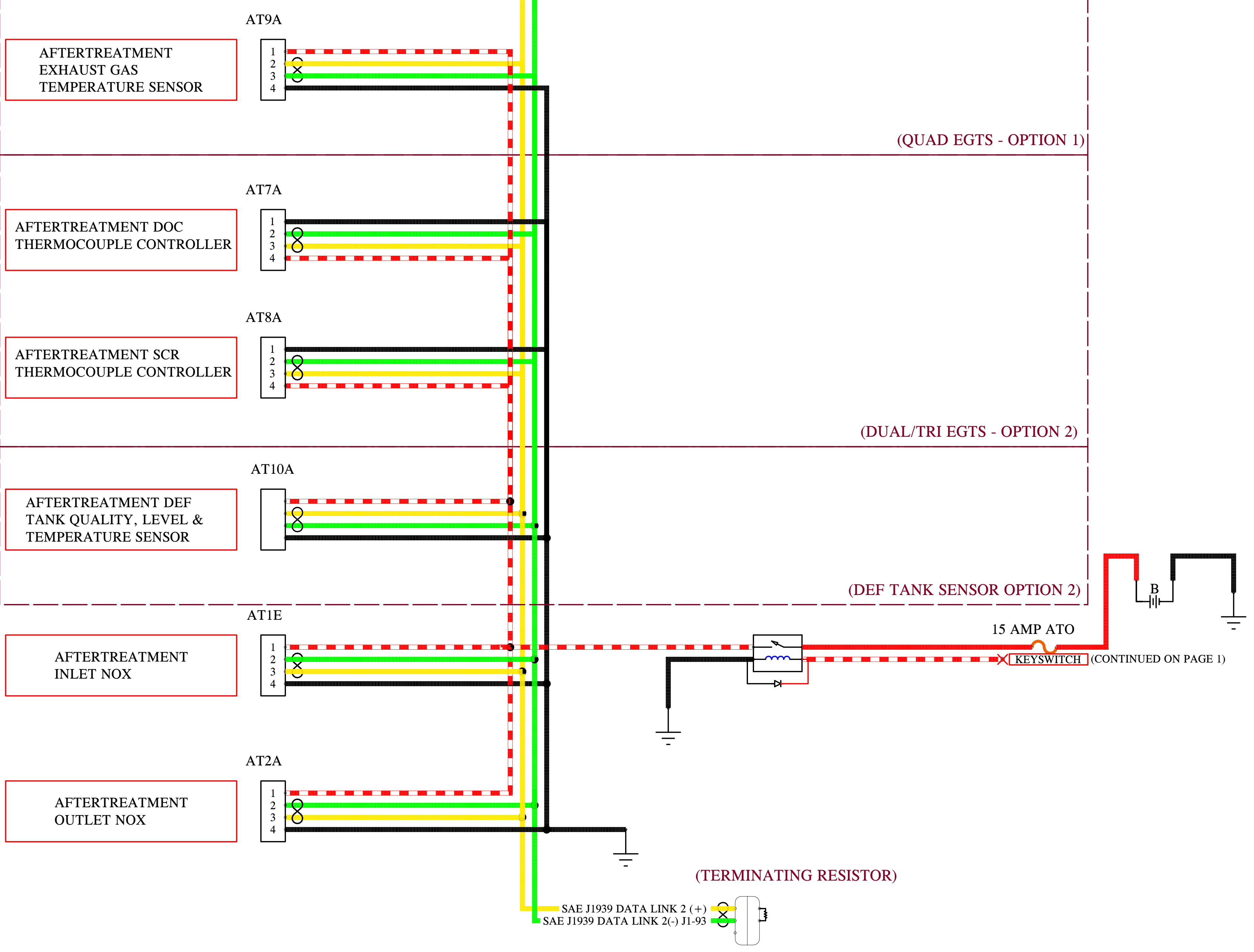
AT7A	TYCO	1-1418390-1
CONNECTOR	NONE	NONE
ALT CONNECTOR	TYCO	AU
TERMINAL PLATING	NONE	NONE
TPA/WEDGE	NONE	NONE
PART NUMBER		5461947

AT8A	TYCO	2-1418390-1
CONNECTOR	NONE	NONE
ALT CONNECTOR	TYCO	AU
TERMINAL PLATING	NONE	NONE
TPA/WEDGE	NONE	NONE
PART NUMBER		5461945

AT10A	OEM	CEB00515
CONNECTOR	NONE	NONE
ALT CONNECTOR	NA	AU
TERMINAL PLATING	NONE	NONE
TPA/WEDGE	NONE	NONE
PART NUMBER		CEB00515

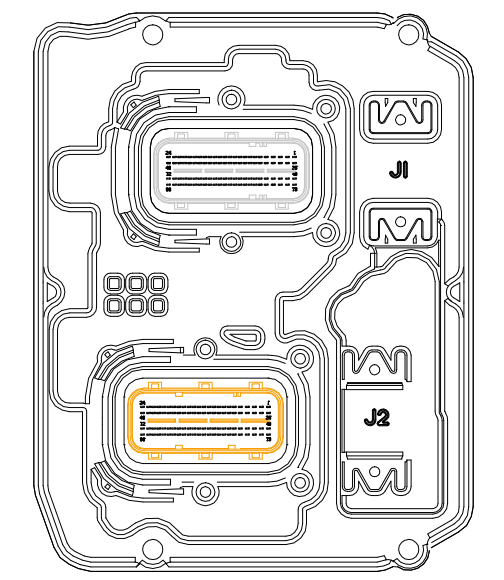
AT1E	TYCO	2-1418390-1
CONNECTOR	NONE	NONE
ALT CONNECTOR	TYCO	AG
TERMINAL PLATING	NONE	NONE
TPA/WEDGE	NONE	NONE
PART NUMBER		5491433

AT2A	TYCO	1-1418390-1
CONNECTOR	NONE	NONE
ALT CONNECTOR	TYCO	AG
TERMINAL PLATING	NONE	NONE
TPA/WEDGE	NONE	NONE
PART NUMBER		5491434



NOTE TO OEM: 120 OHM TERMINATING RESISTOR REQUIRED AT THE OEM END OF THE BACKBONE.

CM2350A



CM1B	DELPHI	13964572
CONNECTOR	NONE	NONE
ALT CONNECTOR	DELPHI	AG
TERMINAL PLATING	DELPHI	15494608
TPA/WEDGE	DELPHI	15318164
CAVITY PLUG	DELPHI	13964572
CONNECTOR	NONE	NONE
ALT CONNECTOR	DELPHI	AG
TERMINAL PLATING	DELPHI	15494608
TPA/WEDGE	DELPHI	15318164
CAVITY PLUG	DELPHI	15318164

ENGINEERING STANDARD:	CES 10903	RELEASE NUMBER:	
ENGINEERING STANDARD:	FEP 00048356	I/O MATRIX:	CM2350 PV IO MATRIX REVISION 21
INSPECTION STANDARD:	FEP 00048355	DRAFTER:	Komal Pingale
WIRE COLOR STANDARD:	FEP 00046857	CHECKER:	Deepthi Uppala
INDUSTRY STANDARD:	SAE J1939-15 SECTION 5.2.2	DESIGN APPROVAL:	Tushar Varma

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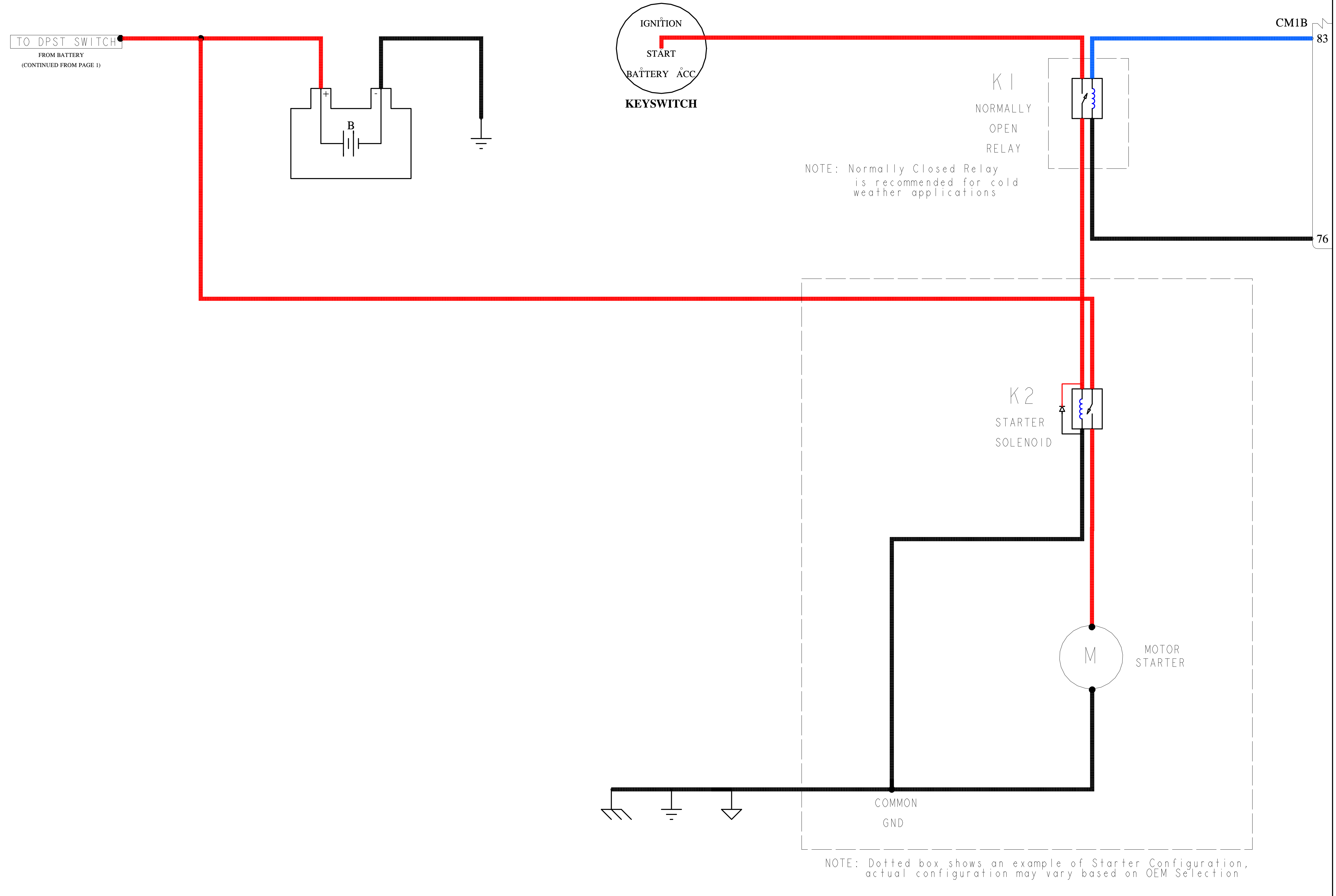
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SIZE	ITEM NAME:	DIAGRAM, WIRING
J	IDENTIFIER:	WIRING DIAGRAM
	CODE IDENT NO:	-
	ITEM NUMBER:	4369464
	REVISION:	3
	SHEET	3 OF 6

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 NOTE: THIS DRAWING HAS NOT COMPLETED ALL REQUIRED PRODUCT RELEASE CHECK PROCESSES.

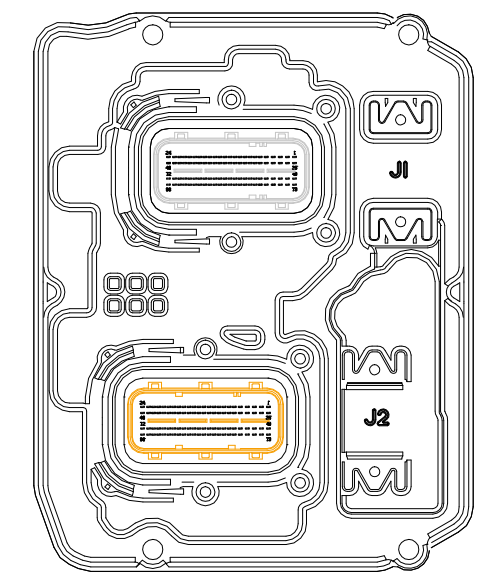
CUMMINS RESTRICTED

REGULAR START USED FOR NON STOP/START AND NON PUSH BUTTON START



NOTE: Dotted box shows an example of Starter Configuration, actual configuration may vary based on OEM Selection

CM2350A



J1-GRAY
 J2-BROWN

CM1B	
CONNECTOR	DELPHI 13964572
ALT CONNECTOR	NONE
TERMINAL PLATING	DELPHI AG
TPA/WEDGE	DELPHI 15494608
CAVITY PLUG	DELPHI 15318164
CONNECTOR	DELPHI 13964572
ALT CONNECTOR	NONE
TERMINAL PLATING	DELPHI AG
TPA/WEDGE	DELPHI 15494608
CAVITY PLUG	DELPHI 15318164

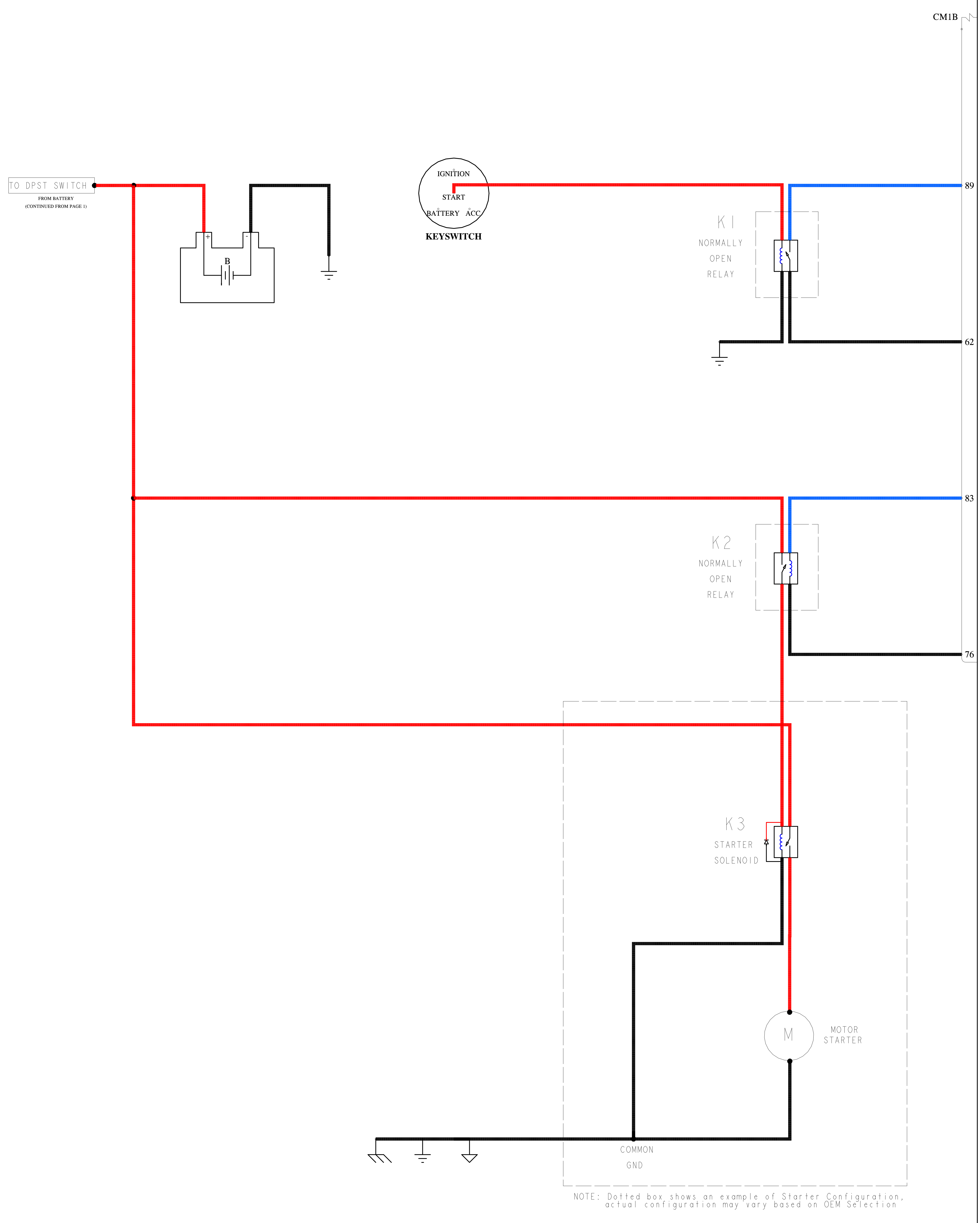
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ENGINEERING STANDARD:	FEP 00048356	I/O MATRIX:	CM2350 PV IO MATRIX REVISION 21
INSPECTION STANDARD:	FEP 00048355	DRAFTER:	Komal Pingale
WIRE COLOR STANDARD:	FEP 00046857	CHECKER:	Deepthi Uppata
INDUSTRY STANDARD:	SAE J1939-15 SECTION 5.2.2	DESIGN APPROVAL:	Tushar Varma

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SIZE	J
ITEM NAME:	DIAGRAM, WIRING
IDENTIFIER:	WIRING DIAGRAM
CODE IDENT NO:	-
ITEM NUMBER:	4369464
REVISION:	3
SHEET	5 OF 6

PRELIMINARY
 NOTE: THIS DRAWING HAS NOT COMPLETED ALL REQUIRED PRODUCT RELEASE CHECK PROCESSES.

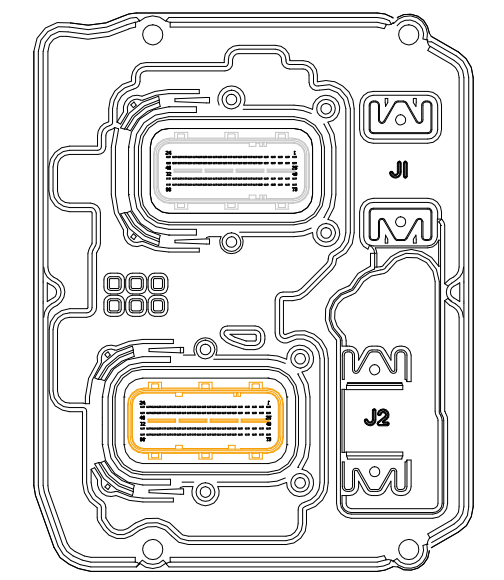
CUMMINS RESTRICTED

ECM CONTROLLED START USED FOR STOP/START AND PUSH BUTTON START



NOTE: Dotted box shows an example of Starter Configuration. actual configuration may vary based on OEM Selection

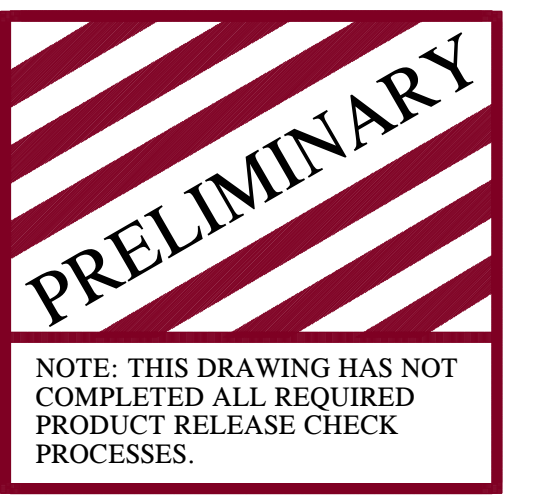
CM2350A



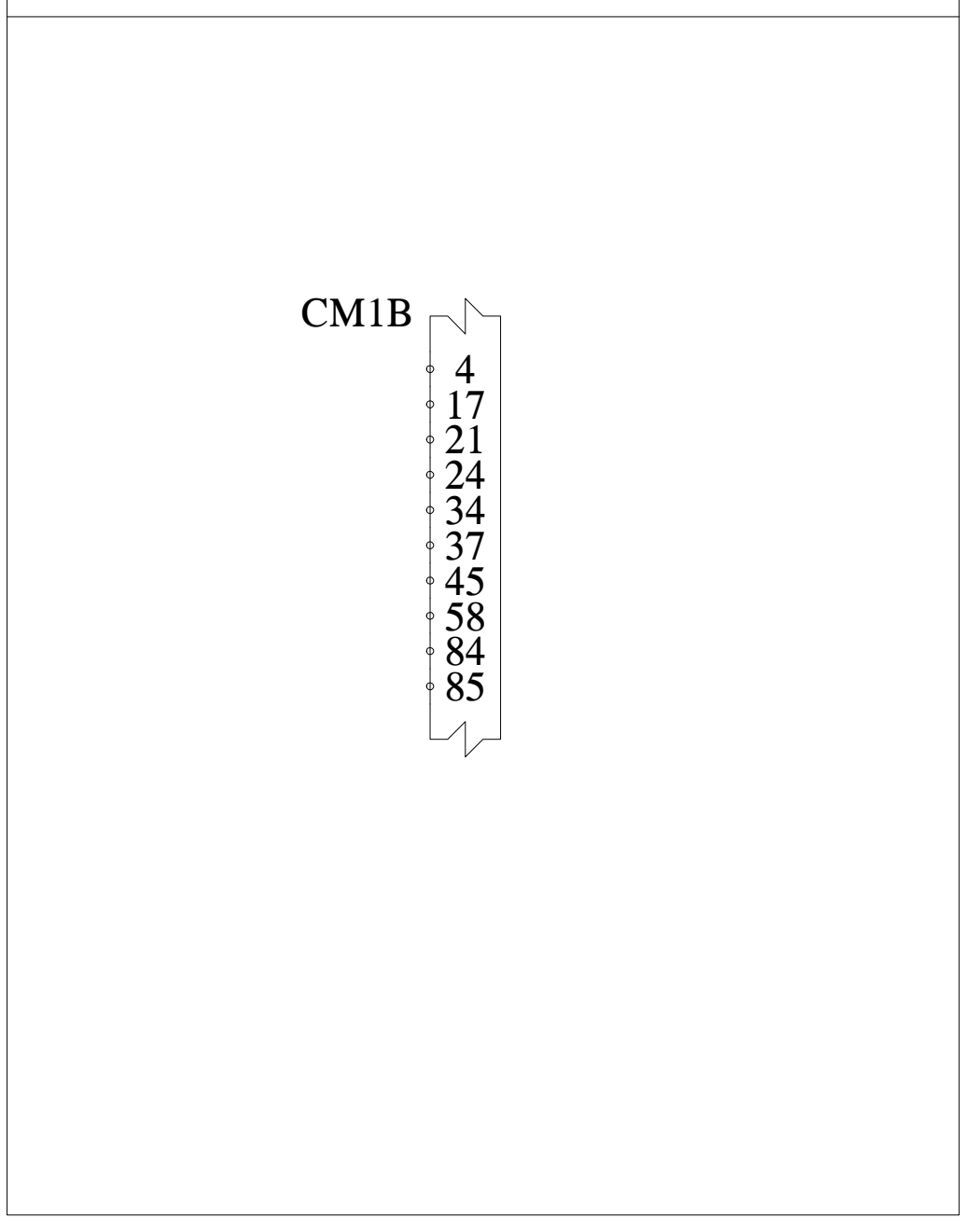
J1-GRAY
 J2-BROWN

ENGINEERING STANDARD:	CES 10903	RELEASE NUMBER:	UNSET
ENGINEERING STANDARD:	FEP 00048356	I/O MATRIX:	CM2350 PV IO MATRIX REVISION UNSET
INSPECTION STANDARD:	FEP 00048355	DRAFTER:	Komal Pingale
WIRE COLOR STANDARD:	FEP 00046857	CHECKER:	Deepthi Uppala
INDUSTRY STANDARD:	SAE J1939-15 SECTION 5.2.2	DESIGN APPROVAL:	Tushar Varma

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SIZE	J
ITEM NAME:	DIAGRAM, WIRING
IDENTIFIER:	WIRING DIAGRAM
CODE IDENT NO:	-
ITEM NUMBER:	4369464
REVISION:	3
SHEET	6 OF 6



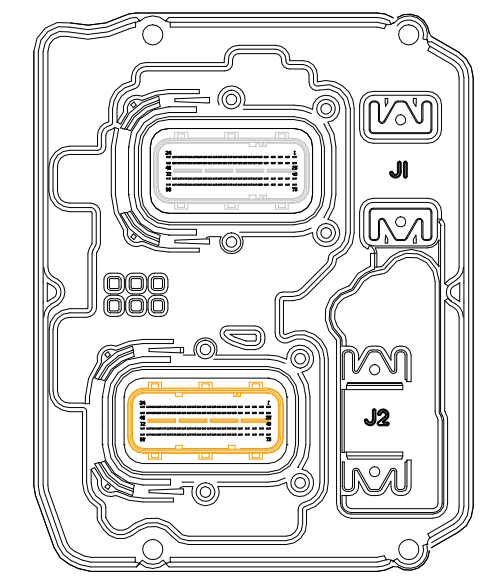
J2 PINS NOT CONNECTED



REVISION HISTORY TABLE

REVISION NUMBER	DATE	DESCRIPTION
5	06 MAY 2019	Sheet 1: 9 pin OBD connector pinning sequence updated from J.K.C.D.A.B.F.G.H to H.J. C.D.A.B.E.F.G
4	16 APR 2019	Sheet 1: J2-62 was updated to OEM Switch/ OEM Sensor/ Tachometer Drive Output (Returns) Sheet 3: J1-67, J1-87, J1-41 were renamed as Spare Analog Sensor Signal. Sheet 4: Keyswitch signal and Relay K1 were deleted and Battery wiring was updated as improvement. Sheet 5: Keyswitch signal and Relay K1 were deleted and Battery wiring was updated as improvement.
3	07 JAN 2019	Sheet 1: Return signal J2-62 was added to Tachometer. J2-90 CRUISE CONTROL ON-OFF/ ENGINE MULTIPLE UNIT SYNCHRONIZATION (SWITCHES) was updated to CRUISE CONTROL ON-OFF SWITCH. Double Pole Single Throw Switch was added to battery section. J2-47 OEM / MULTIPLE UNIT SYNCHRONIZATION 3 (SWITCHES) was updated to OEM SWITCH. J2-68 ENGINE BRAKE SELECTOR 1 / MULTIPLE UNIT SYNCHRONIZATION 2 (SWITCHES) was updated to ENGINE BRAKE J2-92 CLUTCH PEDAL POSITION/SERVICE BRAKE PEDAL/MULTIPLE UNIT SYNCHRONIZATION 1 (SWITCHES) was updated to CLUTCH PEDAL POSITION/SERVICE BRAKE PEDAL (SWITCHES). Sheet 2: OEM PRESURE SIGNAL 1 was updated to OEM PRESSURE SENSOR SIGNAL 1. OEM PRESURE SENSOR 2 was updated to OEM PRESSURE SENSOR SIGNAL 2. J2-16 wire color was updated from Blue to Blue/White Sheet 3: Aftertreatment Inlet NOX AT1E part number changed from 5461850 to 5491433 and Aftertreatment Outlet NOX AT2A part number changed from 5461851 to 5491434. CC8D connector part number updated to DT06-4S-CE05. J1-21 FAN SPEED SIGNAL (HORTON) wire and wire break color were updated from blue to gray. 14 Pin Cross over connector visual aid was updated from ENGINE SIDE CROSS OVER CONNECTOR to OEM SIDE CROSS OVER CONNECTOR Sheet 4: Appendix Start/Stop circuitry segregated into Normal Start/Stop and ECM controlled Start/Stop, also heading changed to Regular Start used for Non Stop/Start and PBS Sheet 5: Appendix ECM controlled circuitry added and heading given as ECM controlled Start used for Stop/Start and PBS. DPST Disconnect Switch is superseding to Master Disconnect Switch Notes: CEB table was updated to indicate the CEB's that apply to this OEM Side Wiring Diagram
2	19 JUN 2018	Sheet 1: Battery Ground Symbol was deleted from Line Heaters. Sheet 5: J2-31 and J2-65 were removed from J2 Not Connected Pins Table.
1	24 APR 2018	Sheet 1: J2-84 Aftertreatment DEF Heater Current Monitor 1 was deleted. J2-85 Aftertreatment DEF Heater Current Monitor 2 was deleted Ground symbol was added to indicate Hose Heating Return. Sheet 2: AT32A Ref List was added to Aftertreatment DEF Dosing Valve. Fan Clutch Return/ Reversible Fan Clutch Return. return at Pin 2 Was rerouted from AT6A & AT6B Pin 57 to pin 54 AT11A connector part number was updated from 54200410 to F715600. Digital VSS Option3 was removed. Twisted wires symbol: AT32A was added. AT6A & AT6B was added AT DPF Differential Pressure Sensor was deleted. OEM Pressure Sensor 1 was deleted. OEM Pressure Sensor 2 was deleted Sheet 3: AT1E part number was updated from 4384391 to 5461850. AT2A part number was updated from 4384390 to 5461851. AT7A was updated to Aftertreatment DOC Thermocouple Controller AT8A was updated to Aftertreatment SCR Thermocouple Controller. AT9A QUAD EGTS: supply was rerouted to pin 1 and return to pin 4. Twisted wires symbol: OEM Temperature sensor was deleted AEB table was updated: 4. For additional information regarding Twistes Pair/ Triplets, refer to CEB 00515. Sheet 4: Normal Stop/Start was added to the wiring diagram.
0	3 JAN 2018	Initial Draft

CM2350A



CM1B		DELPHI	13964572
CONNECTOR	NONE	DELPHI	13964572
ALT CONNECTOR	NONE	DELPHI	AG
TERMINAL PLATING	DELPHI	AG	
TPA/WEDGE	DELPHI	15494608	
CAVITY PLUG	DELPHI	15318164	
CONNECTOR	DELPHI	13964572	
ALT CONNECTOR	NONE	DELPHI	AG
TERMINAL PLATING	DELPHI	AG	
TPA/WEDGE	DELPHI	15494608	
CAVITY PLUG	DELPHI	15318164	

ENGINEERING STANDARD:	CES 10903	RELEASE NUMBER:	
ENGINEERING STANDARD:	FEP 00048356	I/O MATRIX:	CM2350 PV IO MATRIX REVISION 21
INSPECTION STANDARD:	FEP 00048355	DRAFTER:	Komal Pingale
WIRE COLOR STANDARD:	FEP 00046857	CHECKER:	Deepthi Uppata
INDUSTRY STANDARD:	SAE J1939-15 SECTION 5.2.2	DESIGN APPROVAL:	Tushar Varma

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SIZE	ITEM NAME:	DIAGRAM, WIRING
J	IDENTIFIER:	WIRING DIAGRAM
CODE IDENT NO:	-	ITEM NUMBER: 4369464
REVISION:	3	SHEET 4 OF 6