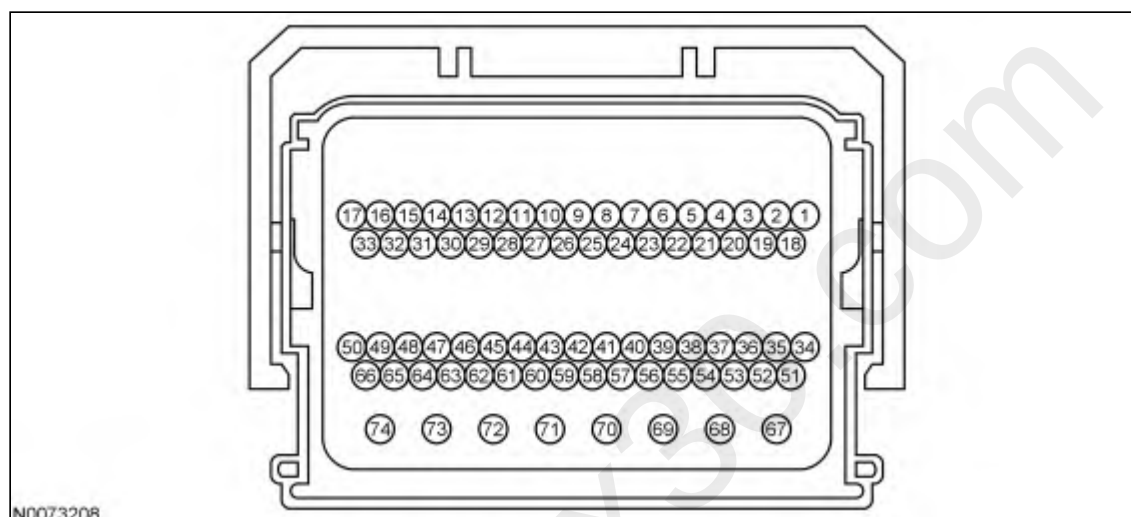
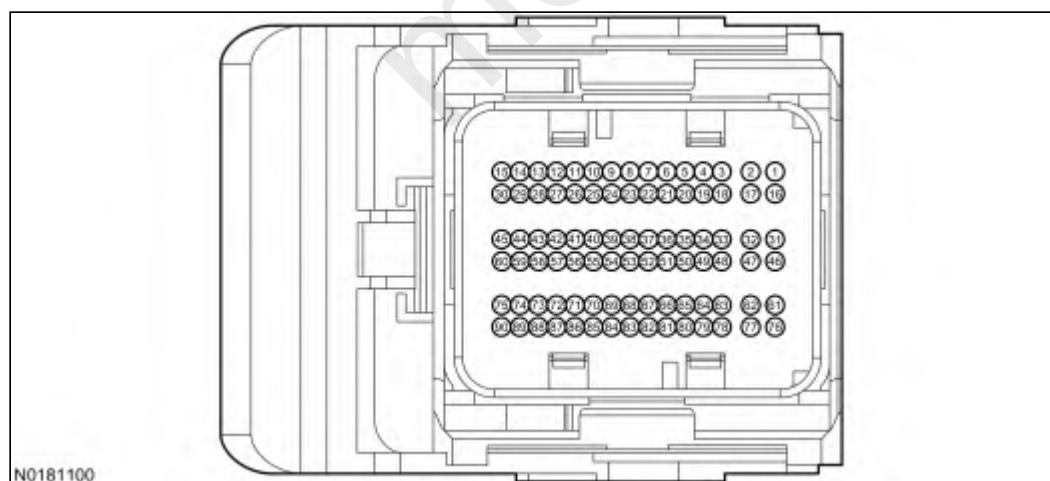
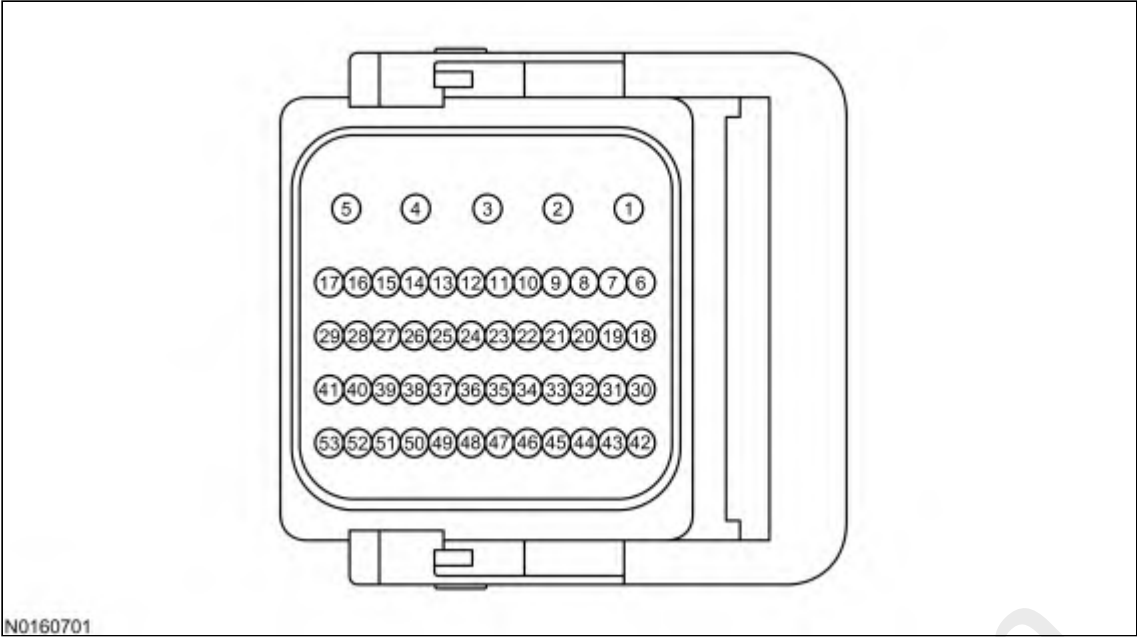


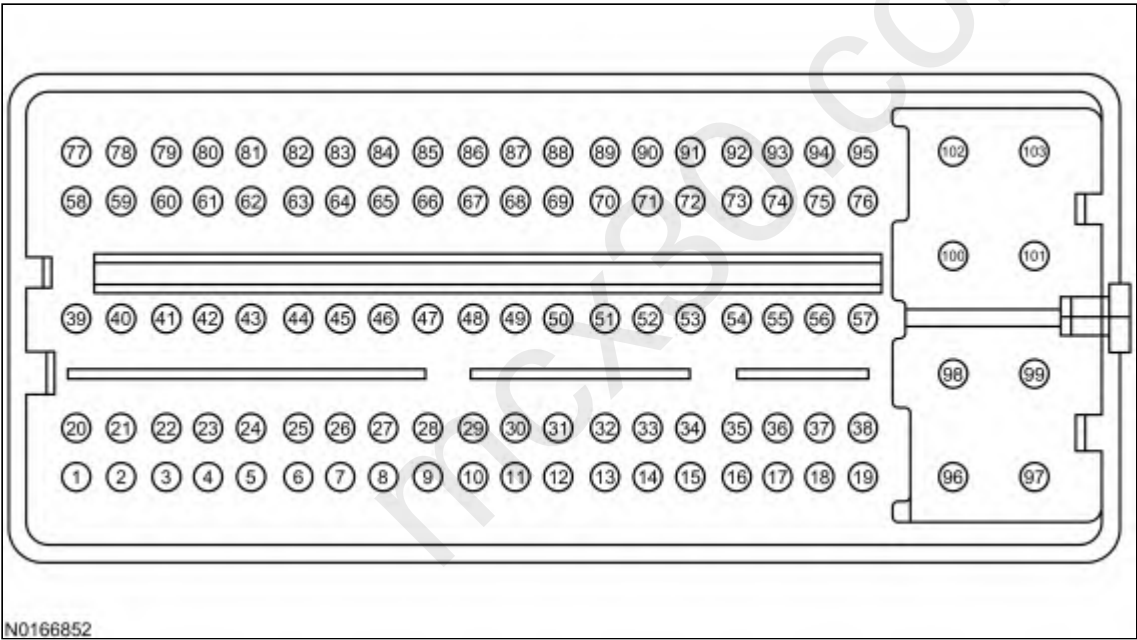
YA: Powertrain Control Module (PCM) Internal Software Concern

Note: This pinpoint test is intended to diagnose informational DTCs that are the result of the failure mode effects management (FME) operating strategy that maintains limited vehicle function in the event of a PCM, software configuration, wiring harness or a component concern. Circuit, component, and communication DTCs may be accompanied by the informational DTCs and must be diagnosed first. Informational DTCs without the presence of other DTCs may or may not indicate the actual concern and should be diagnosed as a symptom.

Powertrain Control Module-B (PCM-B) Connector**A****B****C**



D



Vehicle	Connector	Pin	Circuit
F-650 / F-750	A	67, 68, 69 38	VPWR PCMRC
F-Series Super Duty	B	1, 16, 17, 2 50	VPWR PCMRC
Transit	C	17, 29, 5 48	VPWR PCMRC
Transit Connect	D	101, 102, 103 42	VPWR PCMRC

Vehicle	Connector	Pin	Circuit
All other vehicles	A	69, 68, 67 38	VPWR PCMRC

YA1 PRELIMINARY DIAGNOSIS

Note: For DTC P061A or P061B, make sure the air cleaner and air inlet pipe are correctly installed prior to continuing diagnosis. Check for aftermarket air cleaner products. Aftermarket components or unauthorized modifications to the air inlet system may result in setting DTCs P061A or P061B.

Are any DTCs present other than P05EC, P0600, P060A, P060B, P060C, P061A, P061B, P061C, P062B, P062C, or P168F?

Yes	DISREGARD the current diagnostic trouble code (DTC) at this time. DIAGNOSE the next DTC. GO to Section 4, Diagnostic Trouble Code (DTC) Charts and Descriptions .
No	For DTCs P0600, P060A, or P060B, GO to YA2 . For all others, GO to YA3 .

YA2 CHECK THE PCM VOLTAGE CIRCUITS FOR AN OPEN

- Ignition OFF.
- PCM-B connector disconnected.
- Connect a 5 amp fused jumper wire between the following:

Point A PCM-B Connector, Harness Side	Point B
PCMRC	Ground

- Ignition ON, engine OFF.
- Measure the voltage between:

(+) PCM-B Connector, Harness Side	(-)
VPWR	Ground

Is the voltage greater than 10.5 V?

Yes	GO to YA3 .
No	REPAIR the open circuit. Clear the PCM DTCs. REPEAT the self-test.

YA3 CHECK THE PCM FOR THE LATEST CALIBRATION

- Ignition OFF.
- Remove the jumper wire(s).
- PCM-B connector connected.
- Reprogram the PCM with the latest software. Refer to Section 2, [Flash Electrically Erasable Programmable Read Only Memory \(EEPROM\)](#).
- CARRY OUT the PCM self-test.

Are any DTCs present other than the following: P05EC, P0600, P060A, P060B, P060C, P061A, P061B, P061C, P062B, P062C, or P168F?

Yes	DISREGARD the current DTC at this time. DIAGNOSE the next DTC.
No	For DTC P061C, GO to YA4 . For DTC P062C, GO to YA7 . For DTCs P060B, P061A, or P061B, GO to YA8 . For DTCs P0600, P060A, or P062B, GO to YA9 . For all others, GO to YA10 .

YA4 CHECK THE CRANKSHAFT POSITION (CKP) SENSOR FOR CORRECT OPERATION

- Verify correct operation of the CKP sensor and related circuits. GO to Pinpoint Test [D](#).

Is the concern still present?

Yes	REPAIR as necessary. Clear the PCM DTCs. REPEAT the self-test.
No	GO to YA5 .

YA5 CHECK THE CAMSHAFT POSITION (CMP) SENSOR FOR CORRECT OPERATION

- Verify correct operation of the CMP sensor and related circuits. GO to Pinpoint Test [V](#).

Is the concern still present?

Yes	REPAIR as necessary. Clear the PCM DTCs. REPEAT the self-test.
No	GO to YA6 .

YA6 VERIFY THE CUSTOMER CONCERN

- Use the customer information to recreate the concern.
- CARRY OUT the PCM self-test.

Is DTC P061C still present?

Yes	GO to YA9 .
No	The system is operating correctly at this time. The concern may have been caused by a loose or corroded connector.

YA7 CHECK FOR DTCs IN OTHER VEHICLE MODULES

Note: If DTC P062C is retrieved after a PCM reprogramming, turn the ignition OFF for 5 minutes to allow the PCM to complete a normal power down sequence. Carry out the self-test before continuing with this pinpoint test.

- Check for self-test DTCs in all of the vehicle modules.

Are any DTCs present other than P062C?

Yes	For DTCs set in other modules, REFER to the applicable workshop manual section to DIAGNOSE and REPAIR. DISREGARD the current diagnostic trouble code (DTC) at this time. DIAGNOSE the next DTC. GO to Section 4, Diagnostic Trouble Code (DTC) Charts and Descriptions .
No	GO to YA8 .

YA8 CHECK FOR PROPER TIRE & WHEEL CONFIGURATION

Note: Incorrect Tire Size/Wheel configurations may cause DTC P061A or P061B.

- Verify the vehicle is equipped and configured for the proper wheel and tire size.
- Compare vehicle TREAD Label or OASIS to actual current vehicle installation & module programmable parameter settings in the PCM or the BCM.

Is the vehicle equipped and configured with the correct tires and wheels?

Yes	GO to YA9 .
No	REPAIR as necessary. Clear the PCM DTCs. REPEAT the self-test.

YA9 DRIVER DEMAND AND ADAPTIVE TABLE RELEARN

Note: Obey all traffic laws and regulations while performing the Adaptive Learn Procedure.

- Drive the vehicle for 15 minutes while maintaining an engine RPM greater than 1,400 RPM.
- PERFORM 7 vehicle coast downs with foot off of accelerator for 10 second intervals during the 15 minute drive cycle.
- PERFORM a cruise control activation at a speed that maintains an engine RPM greater than 1,400 RPM during the 15 minute drive cycle.
- CARRY OUT the PCM self-test.

Is the concern still present?

Yes	GO to YA10 .
No	The system is operating correctly at this time.

YA10 CHECK FOR CORRECT PCM OPERATION

- Disconnect all the PCM connectors.
- Visually inspect for:
 - Pushed out pins
 - Corrosion
- Connect the PCM connector and make sure it seats correctly.
- Verify the concern is still present.

Is the concern still present?

Yes	INSTALL a new PCM. REFER to Section 2, Flash Electrically Erasable Programmable Read Only Memory (EEPROM) . Clear the PCM DTCs. REPEAT the self-test.
No	The system is operating correctly at this time. The concern may have been caused by a loose or corroded connector, incorrect or corrupt software.

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