CP9660 PocketScan® Plus

Dactron.

Safety Precautions

This user guide describes the features of the tool and provides step-by-step instructions for operating the tool. Always refer to and follow safety messages and test procedures provided by the manufacturer of the vehicle and the tool.

Read and understand the user guide before operating the tool.

An undetected or uncorrected vehicle malfunction could cause a serious, even fatal, accident. Important safety information in this user guide is intended to protect the user, bystanders, and the vehicle.

Signal Words and Symbols

WARNING!
Indicates a possible hazardous situation that, if not avoided, could result in death or serious injury to operator or bystanders.

NOTICE
Indicates a condition that may result in lost information.

⇨ Indicates a single-step procedure.

Important Safety Messages

WARNING!
This tool may not detect every malfunction. Do not take chances with brakes, steering, or other vital functions of the vehicle. A serious accident could result.

Always wear ANSI-approved goggles for eye protection.

- Before testing a vehicle, make sure the transmission is in PARK (automatic transmission) or NEUTRAL (manual transmission) and the parking brake is set.
- Never lay tools on the vehicle battery.
- Battery acid can burn. If contacted, rinse with water or neutralize with a mild base such as baking soda. If you splash your eyes, flush with water and call a physician immediately.
- Never smoke or have open flames near vehicle. Vapors from gasoline and battery are explosive.

- Do not use the tool if internal circuitry has been exposed to moisture. Internal shorts could cause a fire and damage the vehicle or tool.
- Always turn the ignition key OFF when connecting or disconnecting electrical components unless otherwise instructed.
- Most vehicles are equipped with airbags. Follow vehicle service manual precautions. Serious injury or death could result from an unintended deployment.

WARNING!

A vehicle airbag can open for several minutes after the ignition has been turned off.

- Always follow vehicle manufacturer's warnings, cautions, and service procedures.

About the Tool

The tool allows you to retrieve and erase / reset diagnostic data from the vehicle control module. The diagnostic data can be used to help determine the cause of a vehicle malfunction.

Use the tool to perform the following functions:

Codes / Data	Erase/Reset	Retrieve
Confirmed Codes	Erase	•
Pending Codes	Erase	•
Permanent Codes	—	•
View Data	—	•
MIL Status	—	•
I / M Monitors	Reset	•
View Freeze Data	Erase	•
VIN (Vehicle Identification Number)	—	•

Tool Parts

Part	Description
LCD display	8 line by 21 character monochrome backlit LCD.
▲ READ	Performs the Read Codes function and scrolls back through the screens. Press this key when an up arrow (↑) appears on the display.
▼ ERASE	Performs the Erase Codes function and scrolls forward through the screens. Press this key when a down arrow (↓) appears on the display.
↵ ENTER	Selects displayed item.
← BACK	Returns to the previous screen.
OBD II Connector	Connects the tool to the vehicle connector.

Icons

Icon	Description
↓	Indicates additional information is available on next screen by using the ▼ERASE key.
↑	Indicates additional information is available on previous screen by using the ▲READ key.
CONFIRMED	Confirmed codes are reported when a component is indicating a malfunction is present.

PENDING	Pending codes are reported when a problem occurs during the current or last completed drive cycle.
PERMANENT	Permanent codes are a special type of confirmed code that only the vehicle can erase.
x / y	Appears only when viewing codes. Indicates code sequence and quantity (code x of y). For example, "2 / 9" indicates that the 2nd of 9 codes reported by the computer module is being viewed.
ABS $## Mod $##	Appears only when viewing codes. Indicates the computer module that reported the code. ABS will appear if the code is an ABS code. Mod $## appears when the code is a powertrain code. The Mod $## is the name assigned to the vehicle control module reporting the code.
^R_d ^E_r	Indicates that the **▲READ** and **▼ERASE** hot keys are active

Connect the Tool

To connect the tool to the vehicle:

1. Locate the OBD II connector under the steering column. If the connector is not there, a label should be there indicating the whereabouts of the connector.

2. If necessary, remove the cover from the vehicle connector.
3. Turn the ignition switch to the ON position. Do not start the engine.
4. Plug the OBDII connector attached to the tool into the vehicle connector.

The Tool automatically reads Codes and displays the data. When done viewing data, press ↵ **ENTER** key to return to Diagnostic Menu.

> ### NOTICE
>
> If the vehicle returns a manufacturer specific code, the tool will ask if you wish to select the vehicle and then read ABS codes.
> If the vehicle doesn't return a manufacturer specific code, the tool will ask if you wish to select a vehicle to read ABS codes. ABS is not supported for all vehicles.

Diagnostic Menu User Interface

To select functions:

1. From the Diagnostic Menu, press the **▲READ** or **▼ERASE** arrow key until the desired function is highlighted, then press ↵ **ENTER** to retrieve and display the results.

```
   DIAGNOSTIC MENU
==================
Read Codes           ↑
Erase Codes
MIL Status
View Data             ↓
View Freeze Data
VIN
```

2. When complete, press
   ←**BACK** to return to the
   Diagnostic Menu selec-
   tion screen.

Read Codes

To read the codes:

⇨ Press and hold the
   ▲**READ** key for 2 sec-
   onds then release it, or
   Select Read Codes from
   Diagnostic Menu.

If ABS is supported for your vehi-
cle, a menu is shown to select
either OBDII/EOBD, or ABS.
Select ABS to read ABS codes,
and OBDII/EOBD to read emis-
sions related powertrain codes.
For codes other than ABS codes,
the tool displays Confirmed,
Pending, and Permanent Codes.
Confirmed Trouble Codes are
reported when a component,
sensor, or other part of the
vehicle is indicating a malfunc-
tion is present. The malfunction
must be present for a sufficient
amount of time before the vehi-
cle records and the Tool displays
a Confirmed Trouble Code.
Confirmed codes are indicated
by the CONFIRMED icon.
Pending Codes are only reported
if a problem occurs during the
current or last completed drive
cycle. Pending Codes do not nec-
essarily indicate a faulty compo-
nent or system. Pending Codes
convert to Confirmed Trouble
Codes when an emissions prob-
lem persists long enough to be
considered a real problem, not
an anomaly. Pending Codes are
indicated by a PENDING icon.
Permanent Codes are special
confirmed codes. Permanent
Codes began being reported by
vehicles beginning around 2010,
so they are not supported by
every vehicle. While Confirmed
Codes can be erased by the
tool, Permanent Codes cannot.
Permanent Codes are erased by
the vehicle when the vehicle has
determined the fault is no longer
present. Permanent Codes are
indicated by a PERMANENT icon.

Vehicle Selection

Vehicle Selection will be displayed for Read Codes when a manufacturer specific DTC is retrieved from the vehicle.

Erase Codes

The Erase function performs the following:

- ✓ Erases codes (both Confirmed and Pending DTCs) when erasing OBDII/EOBD codes. Permanent codes can only be erased by the vehicle.
- ✓ May erase Freeze Data results depending on the vehcle.
- ✓ Sets I/M Monitors to not ready.

> **NOTICE**
>
> **i** Perform Erase Codes function only after systems have been checked completely and DTCs have been written down.

To erase codes from the vehicle computer:

1. Set the ignition to Key On Engine Off. Do NOT start the vehicle. The engine should not be running.
2. Press and hold the ▼ERASE key for 3 seconds then release, or select Erase Codes from Diagnostic Menu; press ↵ **ENTER**.
3. When the confirmation message appears on the display, choose one of the following options.
   - To proceed with the operation: Press ↵ **ENTER** for YES.
   - To cancel the operation and return to the Diagnostic Menu: Press ← **BACK** for NO.
4. If ABS is supported for your vehicle, a menu is shown to select either OBDII/EOBD, or ABS. Select ABS to erase ABS codes, and OBDII/EOBD to erase emissions related powertrain codes.

The Tool will automatically perform the Read Codes function after erasing codes. The Tool will then indicate the number of codes remaining.

> **NOTICE**
>
> **i** If after erasing codes a DTC returns, the problem has not been fixed or other faults are present.

MIL Status

MIL (Malfunction Indicator Lamp) status indicates if the

vehicle computer is telling the MIL to illuminate when the engine is running.

- MIL ON indicates that the Malfunction Indicator Lamp should be ON.
- MIL OFF indicates that the Malfunction Indicator Lamp should be OFF.

I/M Monitors (Emissions)

Inspection/Maintenance Monitors provide a snapshot of the Emission System operations by indicating that the I/M Monitors are Ready or Not Ready. For an I/M Monitor to be Ready, the vehicle must have completed a drive cycle (been driven long enough under proper conditions to have completed a drive cycle). A Monitor must be listed as Ready to pass an emissions test. If an I/M Monitor is Not Ready, it is because a drive cycle has not completed. The Tool will indicate Ready (ok), Not Ready (inc), or Not Applicable (n/a) for each I/M Monitor. The Tool supports the following I/M Monitors:

Monitor	Expanded Name
Misfire Monitor	Misfire Monitor
Fuel System Mon	Fuel System Monitor
Comp Component	Comprehensive Components Monitor
Catalyst Mon	Catalyst Monitor
Htd Catalyst	Heated Catalyst Monitor
Evap System Mon	Evaporative System Monitor
Sec Air System	Secondary Air System Monitor
A/C Refrig Mon	Air Conditioning Refrigerant Monitor
Oxygen Sens Mon	Oxygen Sensor Monitor
Oxygen Sens Htr	Oxygen Sensor Heater Monitor
EGR/VVT Sys Mon	Exhaust Gas Recirculation or Variable Valve Timing Monitor
NMHC Cat Mon	Non-Methane Hydrocarbon Catalyst
NOX Treat Mon	Nitrogen Oxide Treatment
Boost Pres Mon	Boost Pressure Monitor
Exhst Gas Sensr	Exhaust Gas Sensor
PM Filter Mon	Particulate Matter Filter

This is a complete list of I/M Monitors supported by the Tool. The number of Monitors read by the Tool from your vehicle may vary. A diesel vehicle, for example, does not have an Oxygen Sensor Monitor. As a result, there will be no Oxygen Sensor Monitor status for a diesel vehicle.

Two types of I/M Monitors tests are:

- ❑ Since DTCs Cleared - shows status of the monitors since the DTCs were last erased.
- ❑ This Drive Cycle - shows status of monitors since the start of the current drive cycle. Refer to the vehicle service manual for more detailed information on emission-related monitors and their status.
- ✓ Some vehicles do not support This Drive Cycle. If vehicle supports both types of monitors the I/M Monitors Menu displays.

View Freeze Data
Displays a snapshot of operating conditions at the time the Diagnostic Trouble Code was created. See PID Definitions for more information.

VIN
The VIN function allows the tool to request the vehicle's VIN number.
The VIN function applies to model year 2000 and newer OBD II compliant vehicles.

System Setup
System Setup allows:

- • Display contrast to be changed
- • Tool information to be viewed
- • Display to be checked
- • Operation of the keypad to be checked
- • Memory of the Tool to be checked
- • Units of measure to be changed

View Data
The View Data function allows real time viewing of the vehicle's computer module's PID data. As the computer monitors the vehicle, information is simultaneously transmitted to the Tool. View Data allows the following items to be viewed on the Tool:
- ❑ Sensor data
- ❑ Operation of switches
- ❑ Operation of solenoids
- ❑ Operation of relays

Multiple PIDs may be sent if vehicle is equipped with more than one computer module (for example a powertrain control module [PCM] and a transmission control module [TCM]. The Tool identifies them by their identification names (ID) assigned by manufacturer. See PID Definitions for more information.

Troubleshooting

- ❏ If a "LINK ERROR" message appears, cycle the ignition key to the OFF position for 10 seconds, then back ON, then press the ↵ **ENTER** key. Make sure the ignition key is in the ON not the ACCESSORY position.
- ❏ If the MIL Status is ON and the MIL is not illuminated with the engine running, then a problem exists in the MIL circuit.

PID Definitions

NOTICE

i Although over 300 PIDS are available, the tool only displays the PIDs the vehicle supports.

PID	PID description
ABS FRP	Absolute Fuel Rail Pressure
ABS LOAD	Absolute Load Value
ABS TPS B, C	Throttle Position B, C
ABSLT TPS	Absolute Throttle Position
ACC POS D	Accelerator Pedal D, E, F
ACC POS REL	Relative Accelerator Pedal Position
AECD1_TI-ME1, TIME 2	Total Run Time with EI-AECD #1 Timer 1 Active, #2 Timer Active
AECD10_TI-ME1, TIME 2	Total Run Time with EI-AECD #10 Timer 1 Active, #2 Timer Active

PID	PID description
AECD11_TI-ME1, TIME 2	Total Run Time with EI-AECD #11 Timer 1 active, #2 Timer Active
AECD12_TI-ME1, TIME 2	Total Run Time with EI-AECD #12 Timer 1 active, #2 Timer Active
AECD13_TI-ME1, TIME 2	Total Run Time with EI-AECD #13 Timer 1 active, #2 Timer Active
AECD14_TI-ME1, TIME 2	Total Run Time with EI-AECD #14 Timer 1 active, #2 Timer Active
AECD15_TI-ME1, TIME 2	Total Run Time with EI-AECD #15 Timer 1 active, #2 Timer Active
AECD16_TI-ME1, TIME 2	Total Run Time with EI-AECD #16 Timer 1 active, #2 Timer Active
AECD17_TI-ME1, TIME 2	Total Run Time with EI-AECD #17 Timer 1 active, #2 Timer Active
AECD18_TI-ME1, TIME 2	Total Run Time with EI-AECD #18 Timer 1 active, #2 Timer Active
AECD19_TIME1, TIME 2	Total Run Time with EI-AECD #19 Timer 1 active, #2 Timer Active
AECD2_TIME1, TIME 2	Total Run Time with EI-AECD #2 Timer 1 Active, #2 Timer Active
AECD20_TIME1, TIME 2	Total Run Time with EI-AECD #20 Timer 1 active, #2 Timer Active
AECD3_TIME1, TIME 2	Total Run Time with EI-AECD #3 Timer 1 Active, #2 Timer Active
AECD4_TIME1, TIME 2	Total Run Time with EI-AECD #4 Timer 1 Active, #2 Timer Active
AECD5_TIME1, TIME 2	Total Run Time with EI-AECD #5 Timer 1 Active, #2 Timer Active
AECD6_TIME1, TIME 2	Total Run Time with EI-AECD #6 Timer 1 Active, #2 Timer Active
AECD7_TIME1, TIME 2	Total Run Time with EI-AECD #7 Timer 1 Active, #2 Timer Active

PID	PID description
AECD8_TIME1, TIME 2	Total Run Time with EI-AECD #8 Timer 1 Active, #2 Timer Active
AECD9_TIME1, TIME 2	Total Run Time with EI-AECD #9 Timer 1 Active, #2 Timer Active
ALCOHOL	Alcohol Fuel Percent
BARO PRS	Barometric Pressure
BAT_PWR	Hybrid Battery Pack Remaining Life
BP_A_ACT, B_ACT	Boost Pressure Sensor A, Sensor B
BP_A_CMD, B_CMD	Commanded Boost Pressure A, Pressure B
BP_A_STAT, B_STAT	Boost Pressure A Control Status, B Control Status
CACT 11, 12	Charge Air Cooler Temperature Bank 1 Sensor 1 supported, Sensor 2 supported
CACT 21,22	Charge Air Cooler Temperature Bank 2 Sensor 1 supported, Sensor 2 supported
CALC LOAD	Calculated Engine Load
CAT TEMP11, TEMP12	Catalitic Converter Temp Bank1, Temp Bank 3
CAT TEMP21, TEMP22	Catalitic Converter Temp Bank2, Temp Bank 4
CLR DIST	Distance since erase
CLR TIME	Minutes Run since Erase
CLR TRPS	Warmups Since Erase
CMD EQ RAT	Commanded Equivalence Ratio
COOLANT	Engine Coolant Temp
DPF_REG_AVGD	Average Distance Between DPF Regen
DPF_REG_AVGT	Average Time Between DPF Regen
DPF_REG_STAT	Diesel Particulate Filter (DPF) Regen Status
DPF_REG_TYP	Diesel Particulate Filter (DPF) Regen Type
DPF_REGEN_PCT	Normalized Trigger for DPF Regen

PID	PID description
DPF1_DP, DPF2_DP	Diesel Particulate Filter (DPF) Bank 1 Delta Pressure Bank 2 Delta Pressure
DPF1_INP, DPF2_INP	Diesel Particulate Filter (DPF) Bank 1 Inlet Pressure, Bank 2 Inlet Pressure
DPF1_INT, DPF2_INT	DPF Bank 1 Inlet Temperature Sensor, Bank 2 Inlet Temperature Sensor
DPF1_OUTP, DPF2_OUTP	Diesel Particulate Filter (DPF) Bank 1 Outlet Pressure, Bank 2 Outlet Pressure
DPF1_OUTT, DPF2_OUTT	DPF Bank 1 Outlet Temperature Sensor, Bank 2 Outlet Temperature Sensor
ECT 1, 2	Engine Coolant Temperature 1, Temperature 2
EGR CMD	Comanded EGR
EGR ERR	Exhaust Gas Recirculation Error
EGR_A_ACT, B_ACT	Actual EGR A Duty Cycle / Position, B Duty Cycle / Position
EGR_A_CMD, B_CMD	Commanded EGR A Duty Cycle / Position, B Duty Cycle / Position
EGR_A_ERR, B_ERR	EGR A Error, B Error
EGRT 11, 21	Exhaust Gas Recirculation Temperature Bank 1 Sensor 1, Bank 2 Sensor 1
EGRT 12, 22	Exhaust Gas Recirculation Temperature Bank 1 Sensor 2, Bank 2 Sensor 2
EGT 11, 21	Exhaust Gas Temperature (EGT) Bank 1 Sensor 1, Bank 2 Sensor 1
EGT 12, 22	Exhaust Gas Temperature (EGT) Bank 1 Sensor 2, Bank 2 Sensor 2
EGT 13, 23	Exhaust Gas Temperature (EGT) Bank 1 Sensor 3, Bank 2 Sensor 3
EGT 14, 24	Exhaust Gas Temperature (EGT) Bank 1 Sensor 4, Bank 2 Sensor 4
EMIS_SUP	Emission requirements to which vehicle is designed
ENG RUN	Time Since Engine Start

PID	PID description
ENG SPEED	Engine RPM
EOT	Engine Oil Temperature
EP_1, 2	Exhaust Pressure Sensor Bank 1, Bank 2
EQ RATIO	Equivalence Ratio
EVAP PURGE	Commanded EVAP Purge
EVAP VP	EVAP Vapor Pressure
EVAP VPA	Absolute EVAP Vapor Pressure
FRP_A, B	Fuel Rail Pressure A, B
FRP_A_CMD, B_CMD	Commanded Fuel Rail Pressure A, B
FRT_A, B	Fuel Rail Temperature A, B
FUEL LEVEL	Fuel Level Input
FUEL PRES	Fuel Rail Pressure
FUEL SYS 1, 2	Fuel System 1 Loop Status, System 2 Loop Status
FUEL TYPE	Fuel Type
FUEL_RATE	Engine Fuel Rate
FUEL_TIMING	Fueling Injection Timing
GPL_STAT	Glow Plug Lamp Status
IAF_A_CMD, B_CMD	Commanded Intake Air Flow A Control, B Control
IAF_A_REL, B_REL	Relative Intake Air Flow A Position, B Position
IAT	Intake Air Temp
IAT 11, 21	Intake Air Temperature Sensor Bank 1 Sensor 1, Bank 2 Sensor 1
IAT 12, 22	Intake Air Temperature Sensor Bank 1 Sensor 2, Bank 2 Sensor 2
IAT 13, 23	Intake Air Temperature Sensor Bank 1 Sensor 3, Bank 2 Sensor 3
ICP_A, B	Injection Control Pressure A, B
ICP_A_CMD, B_CMD	Commanded Injection Control Pressure A, B
IDLE_TIME	Total Idle Run Time
IGN ADV	Timing Advance

PID	PID description
LAMBDA11, 21	02 Sensor Lambda Bank 1 Sensor 1, Bank 2 Sensor 1
LAMBDA12, 22	02 Sensor Lambda Bank 1 Sensor 2, Bank 2 Sensor 2
LT FTRM1	Long Term Fuel Trim 1 or 3
LT FTRM2	Long Term Fuel Trim 2 or 4
LT SEC FT1, 2, 3, 4	Long Term Secondary O2 Sensor Fuel Trim 1, 2, 3, 4
MAF, A, B	Mass Air Flow, A, B
MAP, A, B	Manifold Absolute Pressure, A, B
MIL DIST	MIL_DIST
MIL STATUS	Malfunction Indicator Lamp
MIL TIME	Minutes Run by MIL activated
MST	Manifold Surface Temperature
N/D_STAT	Auto Trans Neutral Drive Status
N/G_STAT	Manual Trans Neutral Gear Status
NNTE_Stat	NOx NTE control area status
NOX 11, 21	NOx Sensor Concentration Bank 1 Sensor 1, Bank 2 Sensor 1
NOX 12,22	NOx Sensor Concentration Bank 1 Sensor 2, Bank 2 Sensor 2
NOX LEVEL HI, HI1, HI2, HI3, HI4	SCR inducement system actual state 10K history HI1 (0-10000 km), 10K history HI2 (10000-20000 km), 10K history HI3 20000-30000 km), 10K history HI4 (30000-40000 km): NOx emission too high
NOX_ADS_DESUL	NOx Adsorber Desulfurization Status
NOX_ADS_REGEN	NOx Adsorber Regen Status
NWI_TIME	Total Run Time by the Engien whicle NOx warning mode is activated
O2S	O2 Voltage or Current indicates Bank / Sensor
O2S11_PCT, O2S21_PCT	02 Sensor Concentration Bank 1 Sensor 1, Bank 2 Sensor 1

PID	PID description
O2S12_PCT, O2S22_PCT	02 Sensor Concentration Bank 1 Sensor 2, Bank 2 Sensor 2
OBD2 STAT	OBD Status
OUT TEMP	Ambient Air Temp
PM 11, PM 21	PM Sensor Mass Concentration Bank 1 Sensor 1, Bank 2 Sensor 1
PNTE_Stat	PM NTE control area status
PTO STATUS	PTO Status
PTO_STAT	Power Take Off (PTO) Status
PTO_TIME	Total Run Time With PTO Active
REAG_DEMD	Average Demanded Reagent Consumption
REAG_LVL	Reagent Tank Level
REAG_RATE	Average Reagent Consumption
REL FRP	Relative Fuel Rail Pressure
REL TPS	Relative Throttle Position
RUN_TIME	Total Engine Run Time
SCR REAG DEV, DEV1, DEV2, DEV3, DEV4	SCR inducement system actual state 10K history DEV1 (0 - 10000 km), 10K history DEV2 (10000 - 20000 km), 10K history DEV3 (20000 - 30000 km), 10K history DEV4 (30000 - 40000 km): deviation of reagent consumption
SCR REAG LOW, LOW1, LOW2, LOW3, LOW4	SCR inducement system actual state 10K history LOW1 (0 - 10000 km), 10K history LOW2 (10000 - 20000 km), 10K history LOW3 (20000 - 30000 km), 10K history LOW4 (30000 - 40000 km): reagent level too low
SCR REAG WRONG, WRONG1, WRONG2, WRONG3, WRONG4	SCR inducement system actual state 10K history WRONG1 (0 - 10000 km), 10K history WRONG2 (10000 - 20000 km), 10K history WRONG3 (20000 - 30000 km), 10K history WRONG4 (30000 - 40000 km): incorrect reagent
SCR SYS ACTIVE	SCR inducement system actual state: inducement system active

PID	PID description
SCR_DIST_1D	Distance travelled in current 10K block (0 - 10000 km)
SCR_DIST_1N, 2N, 3N, 4N	Distance travelled while inducement system active in current 10K block 1N (0 - 10000 km), 20K block 2N (10 - 20000 km), 30K block 3N (20 - 30000 km), 40K block 4N (30 - 40000 km)
SECOND AIR	Secondary Air Status
ST FTRM	Fuel Trim Bank / Sensor
ST FTRM1, 3	Short Term Fuel Trim1 or 3
ST FTRM2, 4	Short Term Fuel Trim2 or 4
ST SEC FT1, 2, 3, 4	Short Term Secondary O2 Sensor Fuel Trim 1, 2, 3, 4
TAC_A_CMD, B_CMD	Commanded Throttle Actuator A Control, B Control
TAC_A_REL, B_REL	Relative Throttle A Position, B Position
TCA_CINP, TCB_CINP	Turbocharger Compressor Inlet Pressure Sensor A, Pressure Sensor B
TCA_CINT, TCB_CINT	Turbocharger A Compressor Inlet Temperature, Turbocharger B
TCA_COUT, TCB_COUT	Turbocharger A Compressor Outlet Temperature, Turbocharger B
TCA_RPM, TCB_RPM	Turbocharger A RPM, B RPM
TCA_TCOUT, TCB_TCOUT	Turbocharger A Turbine Outlet Temperature, Turbocharger B
TCA_TINT, TCB_TINT	Turbocharger A Turbine Inlet Temperature, Turbocharger B
THROT CMD	Commanded Throttle Actuator Control
TP G	Absolute Throttle Position G
TQ_ACT	Actual Engine - Percent Torque
TQ_DD	Driver's Demand Engine - Percent Torque
TQ_MAX1, 2, 3, 4, 5	Engine Percent Torque At Point 1 (Idle), Point 2, 3, 4, 5
TQ_REF	Engine Reference Torque
TROUB CODE	Code causing the Freeze Frame

PID	PID description
VEH SPEED	Vehicle Speed
VGT_A_ACT, B_ACT	Variable Geometry Turbo A Position, Turbo B
VGT_A_CMD, B_CMD	Commanded Variable Geometry Turbo A Position, Turbo B
VGT_A_STAT, B_STAT	Variable Geometry Turbo A Control Status, Turbo B
VPWR	Control Module Voltage
WG_A_ACT, B_ACT	Wastegate A Position, B Position
WG_A_CMD, B_CMD	Commanded Wastegate A Control, B Control
TQ_DD	Driver's demand engine percent torque
TQ_ACT	Actual engine percent torque
TQ_MAX1, MAX2, MAX3, MAX4, MAX5	Engine percent torque at idle point 1, 2, 3, 4, 5
TQ_REF	Engine reference torque
VGT_A_ACT	Variable geometry turbo A position
VGT_A_CMD	Commanded variable geometry turbo A position
VGT_A_STAT	Variable geometry turbo A control status
VGT_B_ACT	Variable geometry turbo B position
VGT_B_CMD	Commanded variable geometry turbo B position
VGT_B_STAT	Variable geometry turbo B control status
VPWR	Control module voltage
WG_A_ACT	Wastegate A position
WG_A_CMD	Commanded wastegate A control
WG_B_ACT	Wastegate B position
WG_B_CMD	Commanded wastegate B control