

Ford HEC Dealer Test Mode

To enter the Ford HEC Dealer Test Mode

On the instrument cluster press and hold the RESET button, turn the ignition switch to the ignition on position II, and then continue pressing the RESET button (5 seconds) until test is displayed in the odometer. The SELECT/RESET button must be released within three seconds of the odometer test display to begin the dealer test mode. Depress the SELECT/RESET button to advance through the following steps until dtc is displayed. Depressing the SELECT/RESET button will display any stored continuous DTCs before proceeding to the next step.

Odometer Display Description

GAGE= Activates gauge sweep of all gauges, then displays present gauge values. Also carries out the checksum tests on ROM and EE. If the gauge sweep is inoperative, INSTALL a new instrument cluster.

All segments illuminated Illuminates all odometer segments. If any odometer segment is inoperative INSTALL a new instrument cluster.

BLUB= Illuminates all micro-controlled indicators and LEDs. Install a new indicator or LED as necessary.

R= Returns to normal operation of all micro-controlled indicators and LEDs and displays hexadecimal value for ROM level. If alternating flashes for FAIL and ROM level are displayed, INSTALL a new instrument cluster.

EE= Displays the hexadecimal value for EE level . If alternating flashes of FAIL and EE level are displayed replace instrument cluster.

DT= Displays hexadecimal coding of final manufacturing test date .

DTC = Displays continuous DTC's in hexadecimal format. Pressing the SELECT/RESET button will display any DTCs stored before proceeding to the next step. See index below for description of trouble codes.

ENG= Displays the English speed in MPH. Speedometer will indicate present speed within tolerances. Display will show 0 if input is not received. If input is invalid for one second or more, or if speed is 0.

M= Displays the metric speed data in kph. Speedometer will indicate present speed within tolerances. Display will show 0 if input is not received. If input is invalid for one second or more, or if speed is 0.

TAC= Displays the tachometer data received from the PCM via the SCP network within tolerances. Tachometer will indicate present RPM. Display will show 0 if input is no received, if input received is invalid for one second or more, or if engine RPM is 0.

FUEL= Displays the code (0-255) for the fuel sender input to the HEC. The fuel gauge will display a filtered fuel level value. This filter will keep the pointer from moving suddenly or erratically.

255= open send +/- 0

232= full stop +/- 0

215= Full mark +/- 10

178= 3/4 mark +/- 8

138= 1/2 mark +/- 7

93= 1/4 mark +/- 5

41= E mark +/- 4

54= Low Fuel (0-59)

0-18= short (0-20 max)

OIL= Displays the code (0-250) for the oil pressure switch input to the HEC. Oil pressure gauge will indicate present oil pressure. Normal oil pressure (greater than 6psi) will display a value between 000 and 176. A low oil pressure or an inoperative engine oil pressure switch (less than 6 psi) will display a value greater than 176.

dEG'C= Display of engine temperature in Degrees C input from cylinder head temperature sensor.

49 C= "C" mark

60 C= Normal band start

120 C= Normal band end

-40 C= No SCP message for 5 seconds

battery voltage Displays the code (0-255) for the battery voltage input to the HEC. Battery voltage gauge will indicate present battery voltage.

93-102 6.2-9.1 volts, low voltage

115-124= 8.5-10.7 volts, Normal band star

t 215-225= 15.8-18 volts, Norm band end

230-241= 16.9-19.1 volts, high voltage

rhEo= Displays the present decimal rheostat dimming input, 0-255

rhi

rhS

rho Not used.

CR= Displays the current RUN/START sense input. Display will show -h for high input with the ignition switch in the START position and -L for low input with the ignition switch in the RUN position.

PA-PE7= not used.

GAGE= Repeats the display cycle

To exit the HEC Dealer Test Mode, turn the ignition switch to the OFF position

NOTE: DTC Codes are not to be used for diagnosing problems. If you believe there is a problem with your car, you should have it scanned with a code reader.

DTC

Description Common Diagnostic Trouble Codes

B1202 9202 Fuel Sender Open Circuit
B1204 9204 Fuel Sender Short to Ground
B1213 9213 Anti-Theft Number of Programmed Keys is Below Minimum
B2103 9232 Antenna Not Connected - Defective Transceiver
B1232 A103 Antenna Not Connected - Defective Transceiver
B1317 9317 Battery Voltage High
B1318 9318 Battery Voltage Low
B1342 9342 ECU Is Defective
B1356 9356 Ignition Run Circuit Open
B1364 9364 Ignition Start Circuit Open
B1600 9600 PATS Ignition Key Transponder Signal is Not Received - Damaged Key or Non -PATS Key
B1601 9601 PATS Received Incorrect Key-Code from Ignition Key Transponder (Unprogrammed Key)
B1602 9602 PATS Received Invalid Format of Key-Code From Ignition Key Transponder (Partial Key Read)
B1681 9681 PATS Transceiver Signal is Not Received (Not Connected, Damaged, or Wiring)
B2139 A139 PCM ID Does Not Match Between Instrument Cluster and PCM
B2141 A141 NVM Configuration Failure (No PCM ID Exchange Between Instrument Cluster and PCM)
B2143 A143 NVM Memory Failure
C1284 5284 Oil Pressure Switch Failure
U1027 D027 SCP Invalid or Missing Data for Engine RPM
U1043 D043 SCP Invalid or Missing Data for Traction Control
U1073 D073 SCP Invalid or Missing Data for Engine Coolant
U1123 D123 SCP Invalid or Missing Data for Odometer
U1147 D147 SCP Invalid or Missing Data for Vehicle Security
U1262 D262 Missing SCP Message