【X-431 Function】Note for reading Ford Mazda fault code

In the case of the fault diagnosis of a ford or Mazda model with the X-431 fault diagnosis, two read fault code modes are displayed. Some customers have entered the two modes without understanding what the role is. Now, the differences between these two modes are explained as follows:

1Request fault code（On Demand Self-Test）

When the key is switched on (engine running or off), some sensors or actuator circuits can be checked. When the read code is executed in different modules, the vehicle produces some action:

Body (BCMii/BCM/GEM): door or tail door unlocking, wiper startup, in-car light start or loudspeaker.

Instrument (IC/IPC/HEC) : rotating speed table, oil meter, speedometer, etc., will swing back and forth, the failure light will be bright, and normal after completion.

Engine (PCM): KOEO (key open, engine off) mode engine motor will run; KOER (key open, engine run) engine idle will increase to 2000-3000rpm and stabilize for a period of time.

Request fault codes in the execution, must according to the software instructions (such as shut the doors, open the audio, brakes, steering wheel and a operator action), such as when the doors open test body request fault code, will be considered a fault code, when close the door after operation again, no fault code.

2. Persistent fault code（Retrieve Continuous Memory DTC)

When key through to any of the conditions (engine running or shut down), can be detected on a regular basis in the ECU fault code storage, in general is hard fault, need to remove

after maintenance solution.

Some fault codes will cause the meter to fail, and some will not be bright (e.g. the engine system will light up the emission related fault codes, and the other will not be bright.) The detection process is relatively fast, the vehicle will not have any movement.

Note: in the current diagnostic software, ford motor, wave box system will typically have a fault code reading methods of sub menu, which include, KOEO (keys, organs), KOER (key, the engine runs), CMDTCs continuous fault code reading way (in diesel engine vehicles, engines and other types of reading code); For other engines, wave box system, usually does not read the usual menu, according to the development of models, most models module read code way is to read requests fault code first, then read last fault codes (also have a plenty of directly read last fault code).