



N55 ENGINE: FC 28A0 OR 101F01 THROTTLE VALVE OPENING ANGLE

MODEL

E70 (X5 Sports Activity Vehicle)	E71 (X6 Sports Activity Coupe)	E82 (1 Series Coupe)	E84 (X3 SAV)
E88 (1 Series Convertible)	E90 (3 Series Sedan)	E92 (3 Series Coupe)	E93 (3 Series Convertible)
F01 (7 Series Sedan)	F02 (7 Series Sedan LWB)	F06 (6 Series Gran Coupe)	F07 (5 Series Gran Turismo)
F10 (5 Series Sedan)	F12 (6 Series Convertible)	F13 (6 Series Coupe)	F15 (X5 SAV)
F16 (X6 SAC)	F22 (2 Series Coupe)	F23 (2 Series Convertible)	F25 (X3 SAV)
F26 (X4 SAC)	F30 (3 Series Sedan)	F32 (4 Series Coupe)	F33 (4 Series Convertible)
F34 (3 Series Gran Turismo)	F36 (4 Series Gran Coupe)		

All models with the N55 Engine.

SITUATION

The engine malfunction warning is illuminated, and one of the following fault codes are stored in the DME shortly after programming the vehicle or with a customer complaint.

- FC 28A0 Throttle valve opening angle absolute pressure intake pipe comparison pressure too high
- Or
- FC 101F01 Throttle valve opening angle absolute pressure intake pipe comparison pressure too high

PROCEDURE

Scenario A: One of the faults are stored only after programming, or after performing a battery reset for an unrelated repair.

Solution: The adaptation procedure must also be performed first before replacing any parts or removing and parts to address this fault.

Adaptation Procedure:

1. Disconnect the tank ventilation valve (purge valve) electrical connector
2. Allow the engine to idle for 15 minutes.
 - This procedure will allow the DME to readapt faster than during a regular test drive

3. After 15 minutes of idling, reconnect the tank ventilation valve (purge valve) electrical connector
4. Clear the fault memory.
5. Test drive the vehicle to ensure the vehicle is operating the correctly.

Scenario B: Customer states the engine malfunction warning is active (the vehicle has not been recently reprogrammed or a battery reset has not been performed).

Or

The solution to scenario A was not effective.

Solution: Perform the applicable test plan for the fault stored. The test plan provides basic diagnostic steps for these faults.

If the test plan results are inconclusive-

- Please enter a diagnosis feedback
 - Continue to the troubleshooting hints below
1. Measure the crankcase pressure.
 - If there are any unusual noises from the engine, try to slightly loosen the engine oil fill cap.
 - If the noise disappears, the problem is related to the crankcase pressure. Isolate the noise and repair/replace as necessary.
 2. Thoroughly check the induction system for leaks using a smoke machine before replacing any parts.
 3. Thoroughly check the crankcase ventilation system for leaks using a smoke machine, and inspect the front crankshaft seal for leakage.
 4. While smoke-testing the crankcase, remove both wastegate vacuum hoses from the wastegate vacuum reservoir (the reservoir is part of the cylinder head cover).
 - If smoke emits from the vacuum reservoir nipples, then the cylinder head cover has developed a micro-crack.
 - As an alternative, you can also use a hand operated vacuum pump to place a vacuum on the reservoir to check for leak down.

In all cases, the engine may have to be hot or cold depending on when the fault stores. The plastic components may expand or contract with the temperatures change.

Do not replace the DME.

If the troubleshooting hints are not effective, create a TSARA Hotline case with a brief description of what has been done, replaced, measured, etc. Wait for a response.

WARRANTY INFORMATION

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