

#### Final Test Status: PASSED

Executed Test: HOT TEST SHORT Engine Serial Number: 86111386

1 Test Number:

#### **Test Configuration**

**Engine Serial Number** 86111386 **Test Specification Number** 96422 MODEL ISB6.7E5310 MOD\_TYPE CM2880 TST\_PAL **VOLTAGE** 25.00 PROD ID BFR SHUTOFF FX80039.05 E ECMCOD

#### **Test Information**

Testbed: ZCK\_TC01

Operator: Cummins Operator

#### Test Date: 2022-02-24 Test Start: 21:11:41

Test End:

#### Teststatus per Phase

Testpoint	Teststatus	Operator	PLC-Error	Meas.Err.	Mat. Review	ECM Error
SETUP	PASSED	0	0	0	0	0
COLD_CRANK	PASSED	0	0	0	0	0
COLD_CRANK_2	PASSED	0	0	0	0	0
ENGINE_START	PASSED	0	0	0	0	0
LOW_IDLE	PASSED	0	0	0	0	0
HIGH_IDLE	PASSED	0	0	0	0	0
RATED_HP	PASSED	0	0	0	0	0
TORQUE_PEAK	PASSED	0	0	0	0	0
LOW_IDLE_2	PASSED	0	0	0	0	0
ENGINE_SHUTDOWN	PASSED	0	0	0	0	0
FINAL_STATUS	PASSED	0	0	0	0	0



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#### Reject Codes

Code	Testpoint	Description	Туре	Channel	Unit	Lower Limit	Value	Upper Limit
OVERRID	SETUP	Error on setting the parameter [SEND_OPERATION=r	ECM	-	-	0.00	0.00	0.00
OVERRID	ENGINE_START	Error on setting the parameter [SEND_OPERATION=r	ECM	-	-	0.00	0.00	0.00
OVERRID	ENGINE_START	Error on setting the parameter [T_Dual_Accelerator_E	ECM	-	-	0.00	0.00	0.00



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#### **ECM Fault Codes**

Testpoint	Number	Description	Masked	Active
LOW_IDLE 249 OEM AMBIENT AIR TEM		OEM AMBIENT AIR TEMPERATURE HIGH ERROR	Α	Α
LOW_IDLE	428	WATER IN FUEL SENSOR CIRCUIT SHORTED HIGH ERROR	Α	Α
LOW_IDLE	584	STARTER RELAY CIRCUIT SHORTED LOW	Α	А
LOW_IDLE	1669	Air-assisted) - Aftertreatment Diesel Exhaust Fluid Tank Level Sensor Circuit	Α	Α
LOW_IDLE	1678	(Air-assisted) - Aftertreatment Diesel Exhaust Fluid Tank Temperature Sens A		Α
LOW_IDLE	1683	1683,Aftertreatment Diesel Exhaust Fluid Tank Heater - Voltage Above Nor	Α	Α
LOW_IDLE	2182	ENG BRK DRIVE #1 LOW CONTROL ERROR	Α	Α
LOW_IDLE	2555	GHC LOW VOLTAGE ERROR #1	Α	Α
LOW_IDLE	2771	Aftertreatment Outlet NOx Sensor - Abnormal Update Rate	Α	Α
LOW IDLE	3558	3558	Α	Α
LOW IDLE	3565	Metering valve circuit voltage above normal (SCR)	A	Α
LOW IDLE	3572	DEF pressure sensor circuit voltage below normal (SCR)	A	Α
LOW IDLE	3577	Purge valve circuit voltage above normal (SCR)	A	Α
LOW IDLE	4173	Air pressure sensor circuit voltage below normal (SCR)	A	Α
LOW IDLE	4174	DEF Temperature sensor circuit voltage above normal (SCR)	A	Α
LOW IDLE	4177	Air pump valve circuit voltage below normal (SCR)	A	A
HIGH IDLE	249	OEM AMBIENT AIR TEMPERATURE HIGH ERROR	A	A
HIGH IDLE	428	WATER IN FUEL SENSOR CIRCUIT SHORTED HIGH ERROR	A	A
HIGH IDLE	584	STARTER RELAY CIRCUIT SHORTED LOW	A	A
HIGH IDLE	1669	Air-assisted) - Aftertreatment Diesel Exhaust Fluid Tank Level Sensor Circuit	F -	A
HIGH IDLE	1678	,	A	A
HIGH IDLE	1683	1683,Aftertreatment Diesel Exhaust Fluid Tank Heater - Voltage Above Nor	A	A
HIGH IDLE	2182	ENG BRK DRIVE #1 LOW CONTROL ERROR	A	A
	2555	GHC LOW VOLTAGE ERROR #1	A	A
HIGH_IDLE	2555		A	
HIGH_IDLE		Aftertreatment Outlet NOx Sensor - Abnormal Update Rate		A
HIGH_IDLE	3558	3558	A	A
HIGH_IDLE	3565	Metering valve circuit voltage above normal (SCR)	A	A
HIGH_IDLE	3572	DEF pressure sensor circuit voltage below normal (SCR)	A	A
HIGH_IDLE	3577	Purge valve circuit voltage above normal (SCR)	A	A
HIGH_IDLE	4173	Air pressure sensor circuit voltage below normal (SCR)	A	A
HIGH_IDLE	4174	DEF Temperature sensor circuit voltage above normal (SCR)	A	A
HIGH_IDLE	4177	Air pump valve circuit voltage below normal (SCR)	A	A
RATED_HP	249	OEM AMBIENT AIR TEMPERATURE HIGH ERROR	Α	Α
RATED_HP	428	WATER IN FUEL SENSOR CIRCUIT SHORTED HIGH ERROR	Α	Α
RATED_HP	584		A	Α
RATED_HP	1669	Air-assisted) - Aftertreatment Diesel Exhaust Fluid Tank Level Sensor Circuit		Α
RATED_HP	1678	,	Α	Α
RATED_HP	1683	,	Α	Α
RATED_HP	2182	ENG BRK DRIVE #1 LOW CONTROL ERROR	Α	Α
RATED_HP	2555	GHC LOW VOLTAGE ERROR #1	Α	Α
RATED_HP	2771	Aftertreatment Outlet NOx Sensor - Abnormal Update Rate	Α	Α
RATED_HP	3558	3558	Α	А
RATED_HP	3565	Metering valve circuit voltage above normal (SCR)	Α	Α
RATED_HP	3572	DEF pressure sensor circuit voltage below normal (SCR)	Α	Α
RATED_HP	3577	Purge valve circuit voltage above normal (SCR)	A	Α
RATED_HP	4173	Air pressure sensor circuit voltage below normal (SCR)	A	Α
RATED_HP	4174	, ,	A	Α
RATED HP	4177	, , ,	A	Α
TORQUE PEAK			A	Α
TORQUE PEAK	428	WATER IN FUEL SENSOR CIRCUIT SHORTED HIGH ERROR	A	Α
	RQUE_PEAK 584 STARTER RELAY CIRCUIT SHORTED LOW			1



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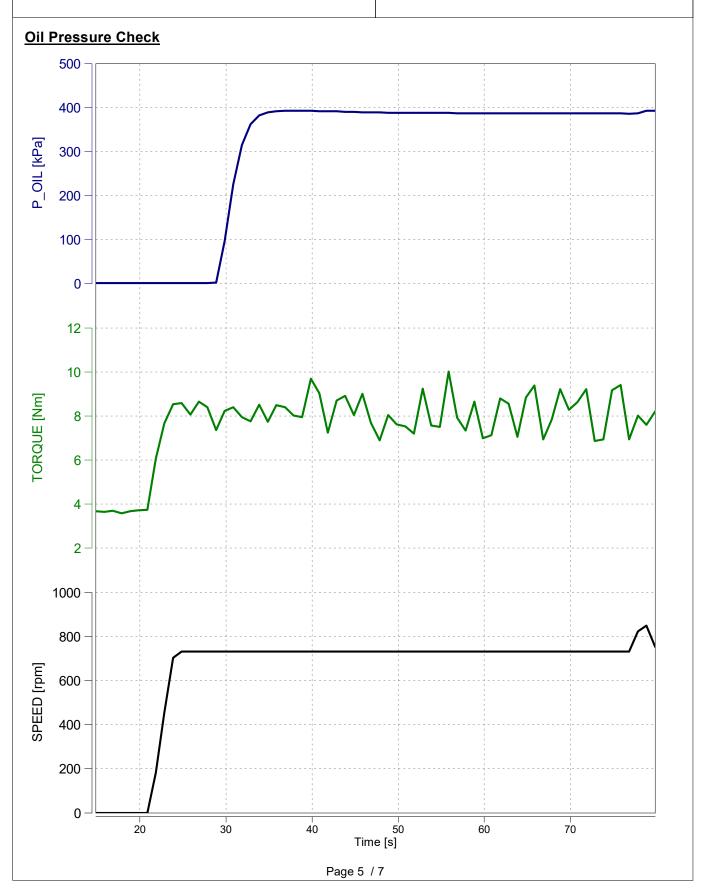
Testpoint	Number	Description	Masked	Active
TORQUE_PEAK	1669	Air-assisted) - Aftertreatment Diesel Exhaust Fluid Tank Level Sensor Circuit	Α	Α
TORQUE_PEAK	1678	(Air-assisted) - Aftertreatment Diesel Exhaust Fluid Tank Temperature Sens	Α	Α
TORQUE_PEAK	1683	1683,Aftertreatment Diesel Exhaust Fluid Tank Heater - Voltage Above Nor	Α	Α
TORQUE_PEAK	2182	ENG BRK DRIVE #1 LOW CONTROL ERROR	Α	Α
TORQUE_PEAK	2555	GHC LOW VOLTAGE ERROR #1	Α	Α
TORQUE_PEAK	2771	Aftertreatment Outlet NOx Sensor - Abnormal Update Rate	Α	Α
TORQUE_PEAK	3558	3558	Α	Α
TORQUE_PEAK	3565	Metering valve circuit voltage above normal (SCR)	Α	Α
TORQUE_PEAK	3572	DEF pressure sensor circuit voltage below normal (SCR)	Α	Α
TORQUE_PEAK	3577	Purge valve circuit voltage above normal (SCR)	Α	Α
TORQUE_PEAK	4173	Air pressure sensor circuit voltage below normal (SCR)	Α	Α
TORQUE_PEAK	4174	DEF Temperature sensor circuit voltage above normal (SCR)	A	Α
TORQUE_PEAK	4177	Air pump valve circuit voltage below normal (SCR)	Α	Α
LOW_IDLE_2	249	OEM AMBIENT AIR TEMPERATURE HIGH ERROR	Α	Α
LOW_IDLE_2	428	WATER IN FUEL SENSOR CIRCUIT SHORTED HIGH ERROR	A	Α
LOW_IDLE_2	584	STARTER RELAY CIRCUIT SHORTED LOW	Α	Α
LOW_IDLE_2	1669	Air-assisted) - Aftertreatment Diesel Exhaust Fluid Tank Level Sensor Circuit	A	Α
LOW_IDLE_2	1678	(Air-assisted) - Aftertreatment Diesel Exhaust Fluid Tank Temperature Sens	Α	Α
LOW_IDLE_2	1683	1683,Aftertreatment Diesel Exhaust Fluid Tank Heater - Voltage Above Nor	Α	Α
LOW_IDLE_2	2182	ENG BRK DRIVE #1 LOW CONTROL ERROR	Α	Α
LOW_IDLE_2	2555	GHC LOW VOLTAGE ERROR #1	A	Α
LOW_IDLE_2	2771	Aftertreatment Outlet NOx Sensor - Abnormal Update Rate	Α	Α
LOW_IDLE_2	3558	3558	A	Α
LOW_IDLE_2	3565	Metering valve circuit voltage above normal (SCR)	Α	Α
LOW_IDLE_2	3572	DEF pressure sensor circuit voltage below normal (SCR)	Α	Α
LOW_IDLE_2	3577	Purge valve circuit voltage above normal (SCR)	Α	Α
LOW_IDLE_2	4173	Air pressure sensor circuit voltage below normal (SCR)	A	Α
LOW_IDLE_2	4174	DEF Temperature sensor circuit voltage above normal (SCR)	Α	Α
LOW_IDLE_2	4177	Air pump valve circuit voltage below normal (SCR)	Α	Α



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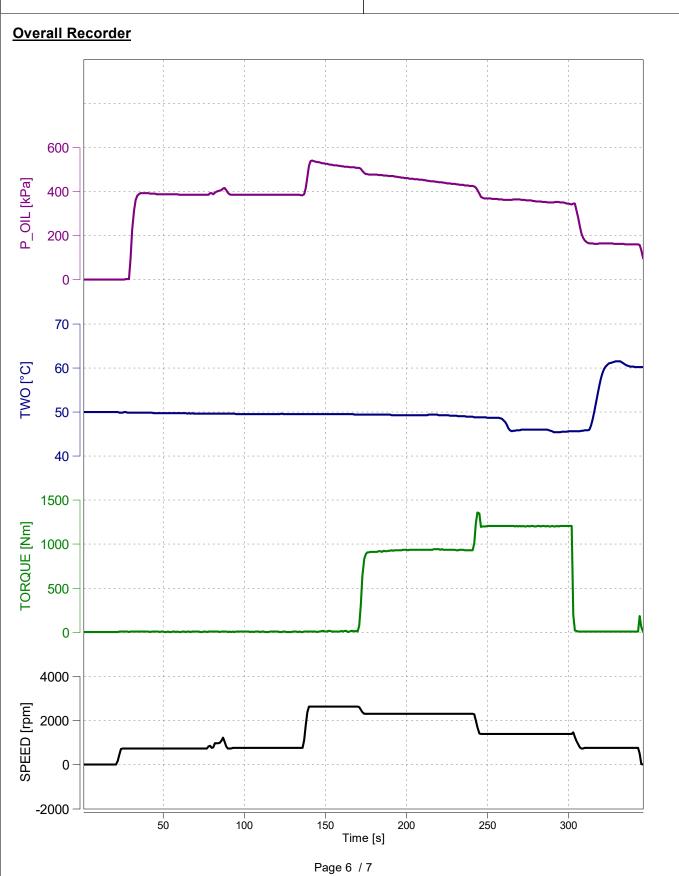




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	Unit	Lower Limit	Value	Upper Limit	Status
LOW_IDLE					
SPEED	rpm	698.00	749.95	810.00	PASSED
P_OIL	kPa	75.00	385.14		PASSED
OPA_ANLG	-		4.86		
HIGH_IDLE					
SPEED	rpm	2600.00	2636.71	2700.00	PASSED
P_OIL	kPa		512.22		
RATED_HP					
SPEED	rpm	2298.00	2299.95	2302.00	PASSED
Р	kW	205.00	225.25	237.00	PASSED
FB_RATE	kg/h	45.00	48.28	56.00	PASSED
P_INTAKE	kPa		161.78		
P_OIL	kPa	275.00	431.78		PASSED
BLOW_VAL	kPa	0.10	1.33	3.00	PASSED
OPA_ANLG	-	0.00	4.86	15.00	PASSED
T_FUEL	°C	38.00	39.06	45.00	PASSED
P_FUEL	kPa		*		
T_TUR_IN	-		*		
TORQUE_PEAK					
SPEED	rpm		1400.02		
TORQUE	Nm	1080.00	1205.18	1260.00	PASSED
FB_RATE	kg/h	18.00	31.18	38.00	PASSED
BLOW_VAL	kPa	0.10	1.18	3.00	PASSED
OPA_ANLG	-	0.00	4.86	15.00	PASSED
T_FUEL	°C	38.00	39.16	45.00	PASSED
P_FUEL	kPa		*		
T_TUR_IN	-		*		
LOW_IDLE_2					
SPEED	rpm	600.00	750.00	800.00	PASSED
P_OIL	kPa	100.00	162.58		PASSED
OPA ANLG	-		4.86		