

#### Final Test Status: PASSED

Executed Test: HOT TEST SHORT Engine Serial Number: 86111301

Test Number: 3

#### **Test Configuration**

**Engine Serial Number** 86111301 **Test Specification Number** 95171 MODEL ISB6.7E5285 MOD\_TYPE CM2880 TST\_PAL **VOLTAGE** 25.00 PROD ID BFR SHUTOFF FX80024.08 E ECMCOD

#### **Test Information**

Testbed: ZCK\_TC01

Operator: Cummins Operator

#### Test Date: 2022-02-24 Test Start: 20:35:44

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 TEMPERATURE HIGH ERROR	A	Α
LOW_IDLE	428	WATER IN FUEL SENSOR CIRCUIT SHORTED HIGH ERROR	Α	Α
LOW_IDLE	584	STARTER RELAY CIRCUIT SHORTED LOW	Α	Α
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	Α	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	A	Α
LOW IDLE	3142	Aftertreatment SCR Inlet Temperature Sensor Circuit - Voltage Above Norm	A	Α
LOW IDLE	3558	3558	A	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	A
LOW IDLE	4173	Air pressure sensor circuit voltage below normal (SCR)	A	A
LOW IDLE	4174	DEF Temperature sensor circuit voltage above normal (SCR)	A	A
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		A
HIGH_IDLE	1678	,	A	A
	1683			
HIGH_IDLE		1683,Aftertreatment Diesel Exhaust Fluid Tank Heater - Voltage Above Nor	A	A
HIGH_IDLE	2182	ENG BRK DRIVE #1 LOW CONTROL ERROR	A	A
HIGH_IDLE	2555	GHC LOW VOLTAGE ERROR #1	A	A
HIGH_IDLE	2771	Aftertreatment Outlet NOx Sensor - Abnormal Update Rate	A	A
HIGH_IDLE	3142	1 9	A	A
HIGH_IDLE	3558	3558	Α	A
HIGH_IDLE	3565	Metering valve circuit voltage above normal (SCR)	A	A
HIGH_IDLE	3572	DEF pressure sensor circuit voltage below normal (SCR)	Α	Α
HIGH_IDLE	3577	Purge valve circuit voltage above normal (SCR)	Α	Α
HIGH_IDLE	4173	Air pressure sensor circuit voltage below normal (SCR)	Α	Α
HIGH_IDLE	4174	DEF Temperature sensor circuit voltage above normal (SCR)	Α	Α
HIGH_IDLE	4177	Air pump valve circuit voltage below normal (SCR)	Α	A
RATED_HP	249	OEM AMBIENT AIR TEMPERATURE HIGH ERROR	Α	A
RATED_HP	428	WATER IN FUEL SENSOR CIRCUIT SHORTED HIGH ERROR	Α	Α
RATED_HP	584	STARTER RELAY CIRCUIT SHORTED LOW	Α	Α
RATED_HP	1669	Air-assisted) - Aftertreatment Diesel Exhaust Fluid Tank Level Sensor Circuit	Α	Α
RATED_HP	1678	(Air-assisted) - Aftertreatment Diesel Exhaust Fluid Tank Temperature Sens	A	А
RATED_HP	1683	1683,Aftertreatment Diesel Exhaust Fluid Tank Heater - Voltage Above Nor	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	3142	Aftertreatment SCR Inlet Temperature Sensor Circuit - Voltage Above Norm	Α	Α
RATED_HP	3558	3558	A	Α
RATED_HP	3565	Metering valve circuit voltage above normal (SCR)	A	Α
RATED HP	3572	DEF pressure sensor circuit voltage below normal (SCR)	A	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	A
RATED HP	4174	DEF Temperature sensor circuit voltage above normal (SCR)	A	A
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#### **ECM Fault Codes**

Testpoint Number		Description	Masked	Active	
TORQUE_PEAK	249	OEM AMBIENT AIR TEMPERATURE HIGH ERROR	Α	Α	
TORQUE_PEAK	428	WATER IN FUEL SENSOR CIRCUIT SHORTED HIGH ERROR	Α	Α	
TORQUE_PEAK	584	STARTER RELAY CIRCUIT SHORTED LOW	Α	Α	
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	3142	Aftertreatment SCR Inlet Temperature Sensor Circuit - Voltage Above Norm	Α	Α	
TORQUE_PEAK	3558	3558	Α	Α	
TORQUE_PEAK	3565	Metering valve circuit voltage above normal (SCR)	Α	Α	
ORQUE_PEAK	3572	DEF pressure sensor circuit voltage below normal (SCR)	Α	Α	
ORQUE_PEAK	3577	Purge valve circuit voltage above normal (SCR)	Α	Α	
ORQUE_PEAK	4173	Air pressure sensor circuit voltage below normal (SCR)	Α	Α	
ORQUE_PEAK	4174	DEF Temperature sensor circuit voltage above normal (SCR)	Α	Α	
TORQUE_PEAK	4177	Air pump valve circuit voltage below normal (SCR)	Α	Α	
OW_IDLE_2	249	OEM AMBIENT AIR TEMPERATURE HIGH ERROR	Α	Α	
OW_IDLE_2	428	WATER IN FUEL SENSOR CIRCUIT SHORTED HIGH ERROR	Α	Α	
OW_IDLE_2	584	STARTER RELAY CIRCUIT SHORTED LOW	Α	Α	
OW_IDLE_2	1669	Air-assisted) - Aftertreatment Diesel Exhaust Fluid Tank Level Sensor Circuit	Α	Α	
.OW_IDLE_2	1678	(Air-assisted) - Aftertreatment Diesel Exhaust Fluid Tank Temperature Sens	Α	Α	
.OW_IDLE_2	1683	1683,Aftertreatment Diesel Exhaust Fluid Tank Heater - Voltage Above Nor	Α	Α	
.OW_IDLE_2	2182	ENG BRK DRIVE #1 LOW CONTROL ERROR	Α	Α	
.OW_IDLE_2	2555	GHC LOW VOLTAGE ERROR #1	Α	Α	
.OW_IDLE_2	2771	Aftertreatment Outlet NOx Sensor - Abnormal Update Rate	Α	Α	
.OW_IDLE_2	3142	Aftertreatment SCR Inlet Temperature Sensor Circuit - Voltage Above Norm	Α	Α	
.OW_IDLE_2	3558	3558	Α	Α	
.OW_IDLE_2	3565	Metering valve circuit voltage above normal (SCR)	Α	Α	
.OW_IDLE_2	3572	DEF pressure sensor circuit voltage below normal (SCR)	Α	Α	
OW_IDLE_2	3577	Purge valve circuit voltage above normal (SCR)	Α	Α	
OW_IDLE_2	4173	Air pressure sensor circuit voltage below normal (SCR)	Α	Α	
OW_IDLE_2	4174	DEF Temperature sensor circuit voltage above normal (SCR)	Α	Α	
_OW_IDLE_2	4177	Air pump valve circuit voltage below normal (SCR)	Α	Α	

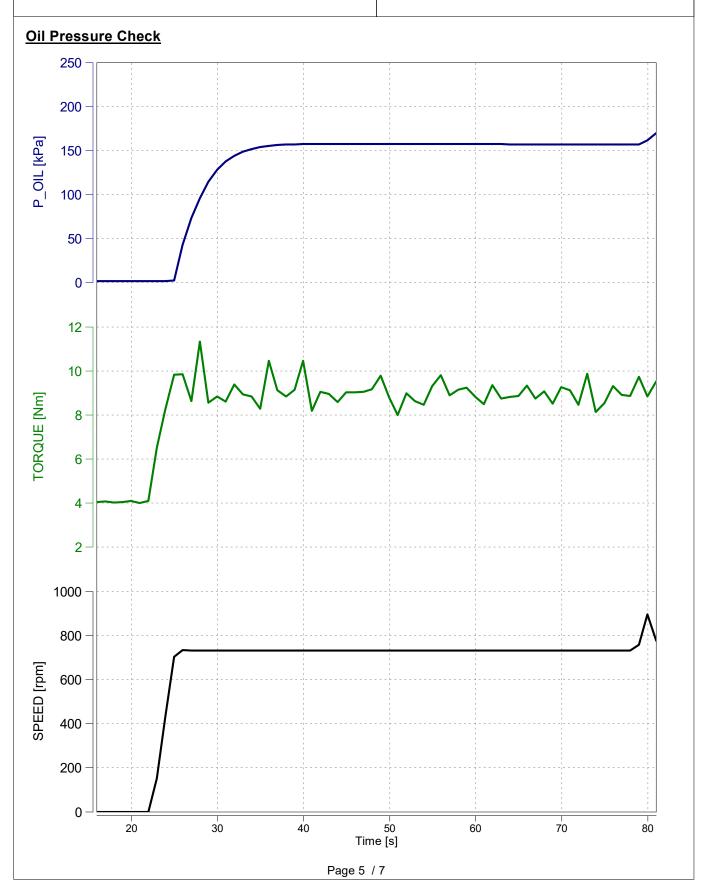


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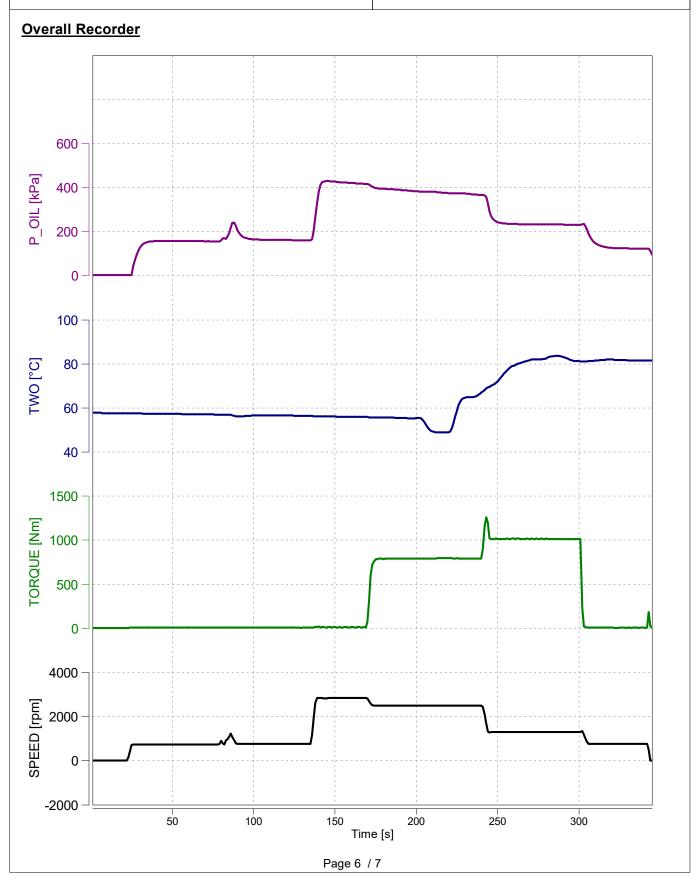




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	Unit	Lower Limit	Value	Upper Limit	Status
LOW_IDLE					
SPEED	rpm	698.00	749.92	810.00	PASSED
P_OIL	kPa	75.00	161.54		PASSED
OPA_ANLG	-		4.86		
HIGH_IDLE					
SPEED	rpm	2800.00	2839.33	2900.00	PASSED
P_OIL	kPa		419.82		
RATED_HP					
SPEED	rpm	2498.00	2499.93	2502.00	PASSED
Р	kW	192.00	207.43	220.00	PASSED
FB_RATE	kg/h	41.00	44.55	51.00	PASSED
P_INTAKE	kPa		161.05		
P_OIL	kPa	275.00	371.96		PASSED
BLOW_VAL	kPa	0.10	1.45	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	-		*		
TORQUE_PEAK					
SPEED	rpm		1299.94		
TORQUE	Nm	916.00	1014.34	1076.00	PASSED
FB_RATE	kg/h	23.00	28.25	33.00	PASSED
BLOW_VAL	kPa	0.10	1.17	3.00	PASSED
OPA_ANLG	-	0.00	4.86	15.00	PASSED
T_FUEL	°C	38.00	39.14	45.00	PASSED
P_FUEL	kPa		*		
T_TUR_IN	-		*		
LOW_IDLE_2					
SPEED	rpm	600.00	749.96	800.00	PASSED
P_OIL	kPa	100.00	124.22		PASSED
OPA ANLG	-		4.86		