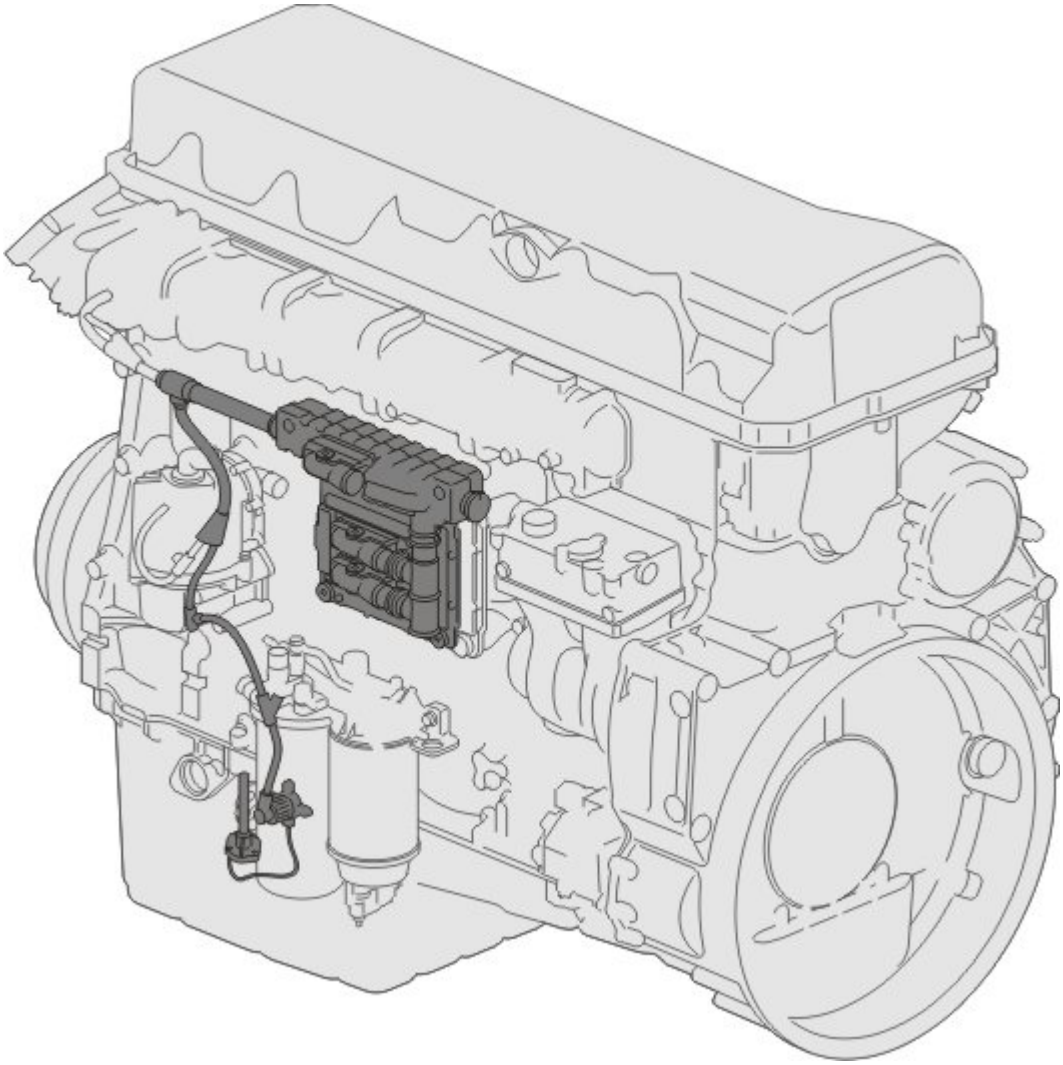
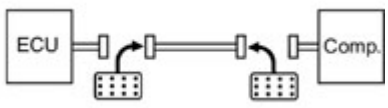
P0197 - Oil Temperature Short Circuit Low



Fault type	Condition for Fault	Observable Symptoms	Possible cause
P0197 FTB00	• The voltage at pin A14.EA:31 is below normal value.	• High fuel consumption. • The coolant temperature gauge shows 0. • Engine fan constantly engaged. • Less powerful engine since the fan takes power from the engine.	• Short circuit to ground. • Connector. • Wiring harness. • Engine control module (ECM).

Resistance measurement



Measuring	Key position	Measurement points	Reference value	Measured value	Other (Special tool No.)

Measuring	Key position	Breakout box	Wiring diagram	Reference value	Measured value	Other (Special tool No.)
		Breakout box	Wiring diagram			
Short Circuit / Open Circuit	Off	3– 31, 4– 11	B119:3– A14.EA:31, B119:4– A14.EA:11,	R = <10 Ω		9998699, 9990014, 88890039
Sensor resistance	Off	3– 4	B119:3– B119:4	Reference Table		9998699, 9990014, 88890039

Reference Table:

[°F]	[°C]	MIN > [Ω]	R [Ω]	MAX < [Ω]
-58	-50	89496,5	105290,0	121083,5
-49	-45	63169,4	73796,0	84422,6
-40	-40	45163,6	52394,0	59624,4
-31	-35	32656,4	37666,0	42675,6
-22	-30	23871,0	27375,0	30879,0
-13	-25	17649,6	20125,0	22600,4
-4	-20	13181,5	14945,0	16708,5
5	-15	9927,6	11205,0	12482,4
14	-10	7555,7	8480,0	9404,3
23	-5	5792,4	6472,0	7151,6
32	0	4477,9	4981,0	5484,1
41	5	3494,6	3870,0	4245,4
50	10	2747,3	3029,0	3310,7
59	15	2178,2	2391,0	2603,8
68	20	1736,6	1900,0	2063,4
77	25	1393,8	1520,0	1646,2
86	30	1127,3	1224,0	1320,7
95	35	916,9	992,3	1067,7
104	40	750,0	809,1	868,2
113	45	617,1	663,5	709,9
122	50	510,4	547,0	583,6
131	55	424,4	453,4	482,4
140	60	354,5	377,9	401,3
149	65	297,8	316,5	335,2
158	70	251,6	266,5	281,4
167	75	213,1	225,3	237,5
176	80	181,4	191,2	201,0
185	85	155,1	163,1	171,1
194	90	133,1	139,7	146,3
203	95	114,7	120,1	125,5
212	100	99,2	103,6	108,0
221	105	86,2	89,0	93,4
230	110	75,0	78,0	81,0
239	115	65,6	68,1	70,6
248	120	57,6	59,6	61,6
257	125	50,6	52,3	54,0
266	130	44,7	46,1	47,5
275	135	39,4	40,7	42,0
284	140	34,8	36,0	37,2
293	145	30,8	32,0	33,2
302	150	27,4	28,5	29,6