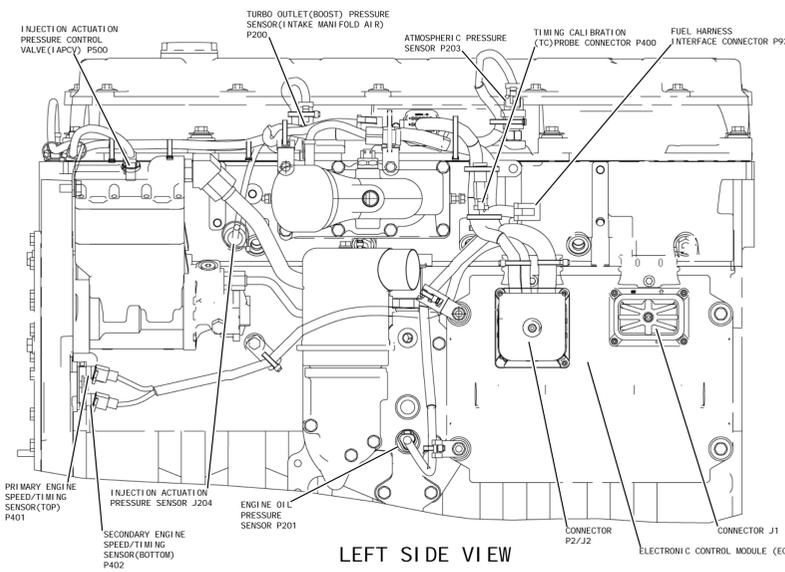
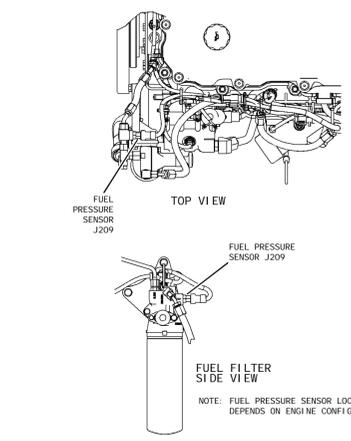
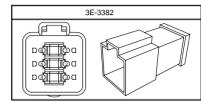


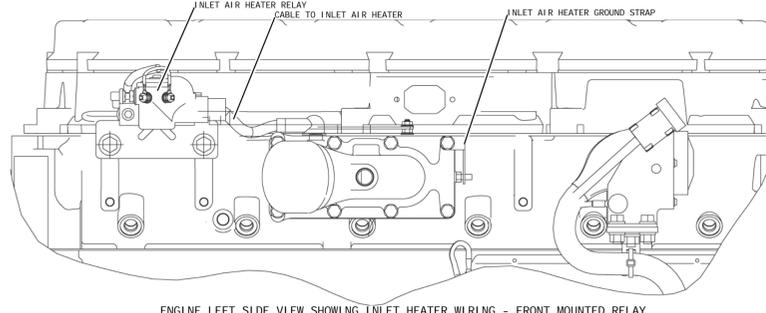
TOP VIEW



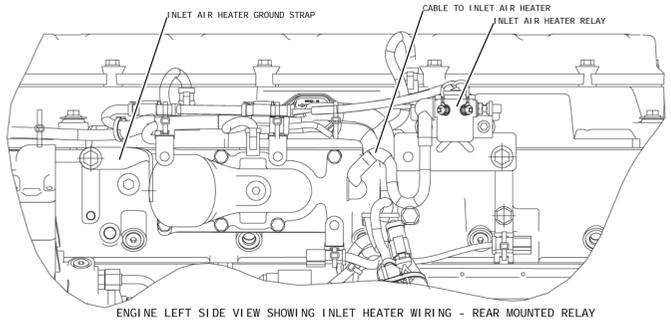
LEFT SIDE VIEW



NOTE: FUEL PRESSURE SENSOR LOCATION DEPENDS ON ENGINE CONFIGURATION



ENGINE LEFT SIDE VIEW SHOWING INLET HEATER WIRING - FRONT MOUNTED RELAY



ENGINE LEFT SIDE VIEW SHOWING INLET HEATER WIRING - REAR MOUNTED RELAY

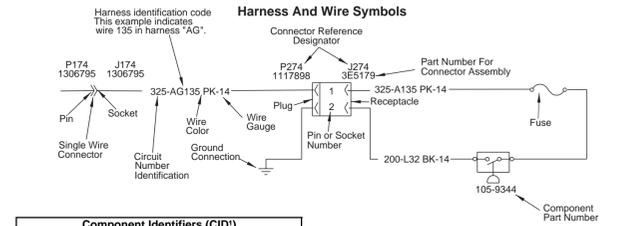


REN7948-01  
November 2006

# Schematic

## C9 Industrial Engine Electrical System

JSC1-UP  
MBD1-UP



Component Identifiers (CID) Module Identifier (MID) <sup>1</sup>		Failure Mode Identifiers (FMI) <sup>2</sup>	
CID	Component	FMI No.	Failure Description
0001	Injector Cylinder #1	0	Data valid but above normal operational range.
0002	Injector Cylinder #2	1	Data valid but below normal operational range.
0003	Injector Cylinder #3	2	Data erratic, intermittent, or incorrect.
0004	Injector Cylinder #4	3	Voltage above normal or shorted high.
0005	Injector Cylinder #5	4	Voltage below normal or shorted low.
0006	Injector Cylinder #6	5	Current below normal or open circuit.
0041	ECM (Electronic Control Module) 8 Volt DC Supply	6	Current above normal or grounded circuit.
0042	Injector Actuation Valve	7	Mechanical system not responding properly.
0251	Throttle Position Sensor	8	Abnormal frequency, pulse width, or period.
0094	Fuel Pressure Sensor	9	Abnormal update.
0100	Engine Oil Pressure Sensor	10	Abnormal rate of change.
0102	Boost Pressure Sensor	11	Failure mode not identifiable.
0110	Engine Coolant Temperature Sensor	12	Bad device or component.
0164	Injector Actuation Pressure Sensor	13	Out of calibration.
0169	Electrical System Voltage	14	Parameter failures.
0242	Inlet Manifold Air Temperature Sensor	15	Parameter failures.
0253	Personality Module	16	Parameter not available.
0261	Engine Timing Calibration	17	Module not responding.
0262	5 Volt Sensor Power Supply	18	Sensor supply fault.
0268	Programmed Parameter Fault	19	Condition not met.
0274	Atmospheric Pressure Sensor	20	Parameter failures.
0342	Secondary Engine Speed Sensor		
0817	Inlet Air Heater Relay		
1835	Auxiliary Pressure Sensor		
1836	Auxiliary Temperature Sensor		
2417	Ether Injector Control Solenoid		

Related Electrical Service Manuals		
Troubleshooting	Title	Form Number
	Systems Operation / Testing and Adjusting	REN792418
	Operation and Maintenance Manual	REN79597
		SEBU7772

Event Identifiers (EID)		Event	
EID	Event	EID	Event
E096	High Fuel Pressure	E360	Low Engine Oil Pressure
E361	High Engine Coolant Temperature	E362	Engine Overspeed
E443	High Auxiliary Pressure	E445	High Auxiliary Temperature
E539	High Inlet Manifold Air Temperature	E243	Low Engine Coolant Level

<sup>1</sup> The CID is a diagnostic code that indicates which circuit is faulty.  
<sup>2</sup> The MID is a diagnostic code that indicates which electronic control module diagnosed the fault.

### CONNECTOR TABLES FOR HARNESS 227-3812

WIRING	WIRING	WIRING	WIRING
CIRCUIT	WIRING	CIRCUIT	WIRING
1	135-2273	1	135-2273
2	135-2264	2	135-2264
3	135-2267	3	135-2267
4	135-2269	4	135-2269
5	135-2270	5	135-2270
6	135-2271	6	135-2271
7	135-2272	7	135-2272
8	135-2273	8	135-2273
9	135-2274	9	135-2274
10	135-2275	10	135-2275
11	135-2276	11	135-2276
12	135-2277	12	135-2277
13	135-2278	13	135-2278
14	135-2279	14	135-2279
15	135-2280	15	135-2280
16	135-2281	16	135-2281
17	135-2282	17	135-2282
18	135-2283	18	135-2283
19	135-2284	19	135-2284
20	135-2285	20	135-2285
21	135-2286	21	135-2286
22	135-2287	22	135-2287
23	135-2288	23	135-2288
24	135-2289	24	135-2289
25	135-2290	25	135-2290
26	135-2291	26	135-2291
27	135-2292	27	135-2292
28	135-2293	28	135-2293
29	135-2294	29	135-2294
30	135-2295	30	135-2295
31	135-2296	31	135-2296
32	135-2297	32	135-2297
33	135-2298	33	135-2298
34	135-2299	34	135-2299
35	135-2300	35	135-2300
36	135-2301	36	135-2301
37	135-2302	37	135-2302
38	135-2303	38	135-2303
39	135-2304	39	135-2304
40	135-2305	40	135-2305
41	135-2306	41	135-2306
42	135-2307	42	135-2307
43	135-2308	43	135-2308
44	135-2309	44	135-2309
45	135-2310	45	135-2310
46	135-2311	46	135-2311
47	135-2312	47	135-2312
48	135-2313	48	135-2313
49	135-2314	49	135-2314
50	135-2315	50	135-2315
51	135-2316	51	135-2316
52	135-2317	52	135-2317
53	135-2318	53	135-2318
54	135-2319	54	135-2319
55	135-2320	55	135-2320
56	135-2321	56	135-2321
57	135-2322	57	135-2322
58	135-2323	58	135-2323
59	135-2324	59	135-2324
60	135-2325	60	135-2325
61	135-2326	61	135-2326
62	135-2327	62	135-2327
63	135-2328	63	135-2328
64	135-2329	64	135-2329
65	135-2330	65	135-2330
66	135-2331	66	135-2331
67	135-2332	67	135-2332
68	135-2333	68	135-2333
69	135-2334	69	135-2334
70	135-2335	70	135-2335
71	135-2336	71	135-2336
72	135-2337	72	135-2337
73	135-2338	73	135-2338
74	135-2339	74	135-2339
75	135-2340	75	135-2340
76	135-2341	76	135-2341
77	135-2342	77	135-2342
78	135-2343	78	135-2343
79	135-2344	79	135-2344
80	135-2345	80	135-2345
81	135-2346	81	135-2346
82	135-2347	82	135-2347
83	135-2348	83	135-2348
84	135-2349	84	135-2349
85	135-2350	85	135-2350
86	135-2351	86	135-2351
87	135-2352	87	135-2352
88	135-2353	88	135-2353
89	135-2354	89	135-2354
90	135-2355	90	135-2355
91	135-2356	91	135-2356
92	135-2357	92	135-2357
93	135-2358	93	135-2358
94	135-2359	94	135-2359
95	135-2360	95	135-2360
96	135-2361	96	135-2361
97	135-2362	97	135-2362
98	135-2363	98	135-2363
99	135-2364	99	135-2364
100	135-2365	100	135-2365

### CONNECTOR TABLES FOR HARNESS 263-7731

WIRING	WIRING	WIRING	WIRING
CIRCUIT	WIRING	CIRCUIT	WIRING
1	135-2631	1	135-2631
2	135-2632	2	135-2632
3	135-2633	3	135-2633
4	135-2634	4	135-2634
5	135-2635	5	135-2635
6	135-2636	6	135-2636
7	135-2637	7	135-2637
8	135-2638	8	135-2638
9	135-2639	9	135-2639
10	135-2640	10	135-2640
11	135-2641	11	135-2641
12	135-2642	12	135-2642
13	135-2643	13	135-2643
14	135-2644	14	135-2644
15	135-2645	15	135-2645
16	135-2646	16	135-2646
17	135-2647	17	135-2647
18	135-2648	18	135-2648
19	135-2649	19	135-2649
20	135-2650	20	135-2650
21	135-2651	21	135-2651
22	135-2652	22	135-2652
23	135-2653	23	135-2653
24	135-2654	24	135-2654
25	135-2655	25	135-2655
26	135-2656	26	135-2656
27	135-2657	27	135-2657
28	135-2658	28	135-2658
29	135-2659	29	135-2659
30	135-2660	30	135-2660
31	135-2661	31	135-2661
32	135-2662	32	135-2662
33	135-2663	33	135-2663
34	135-2664	34	135-2664
35	135-2665	35	135-2665
36	135-2666	36	135-2666
37	135-2667	37	135-2667
38	135-2668	38	135-2668
39	135-2669	39	135-2669
40	135-2670	40	135-2670
41	135-2671	41	135-2671
42	135-2672	42	135-2672
43	135-2673	43	135-2673
44	135-2674	44	135-2674
45	135-2675	45	135-2675
46	135-2676	46	135-2676
47	135-2677	47	135-2677
48	135-2678	48	135-2678
49	135-2679	49	135-2679
50	135-2680	50	135-2680
51	135-2681	51	135-2681
52	135-2682	52	135-2682
53	135-2683	53	135-2683
54	135-2684	54	135-2684
55	135-2685	55	135-2685
56	135-2686	56	135-2686
57	135-2687	57	135-2687
58	135-2688	58	135-2688
59	135-2689	59	135-2689
60	135-2690	60	135-2690
61	135-2691	61	135-2691
62	135-2692	62	135-2692
63	135-2693	63	135-2693
64	135-2694	64	135-2694
65	135-2695	65	135-2695
66	135-2696	66	135-2696
67	135-2697	67	135-2697
68	135-2698	68	135-2698
69	135-2699	69	135-2699
70	135-2700	70	135-2700
71	135-2701	71	135-2701
72	135-2702	72	135-2702
73	135-2703	73	135-2703
74	135-2704	74	135-2704
75	135-2705	75	135-2705
76	135-2706	76	135-2706
77	135-2707	77	135-2707
78	135-2708	78	135-2708
79	135-2709	79	135-2709
80	135-2710	80	135-2710
81	135-2711	81	135-2711
82	135-2712	82	135-2712
83	135-2713	83	135-2713
84	135-2714	84	135-2714
85	135-2715	85	135-2715
86	135-2716	86	135-2716
87	135-2717	87	135-2717
88	135-2718	88	135-2718
89			