



Service Bulletin

File in Section: -

Bulletin No.: PI0631E

Date: September, 2012

PRELIMINARY INFORMATION

Subject: Malfunction Indicator Lamp (MIL) On, Various DTCs Set, IPC Inoperative, Display and/or BCM Fuse Blown

Models: 2012-2013 Chevrolet Impala
Vehicles Without RPO NU6 Emissions
Built Prior to July 16, 2012

This PI is being revised to add the 2013 model year and update the build date. Please discard PI0631D.

Condition/Concern

Some customers may comment on one or more of the following conditions:

- The malfunction indicator lamp (MIL) is on.
- The ABS indicator turns ON.
- The ABS system engages.
- The Traction Control indicator turns ON.
- The Traction Control engages.
- The driver information center (DIC) displays the Service Stability System message.

In rare cases, the instrument panel cluster (IPC) may be inoperative. Further investigation may find the display, BCM fuse, and/or IGN 1 fuse blown in the underhood fuse block (UBEC).

Technicians may find various DTCs set (see keyword list below).

Not all of the effects or driver notifications listed have been experienced. However, the different effects and driver notifications may be caused by one of the wires in the engine harness being chafed or cut. Due to the cause of the condition, and the positions of the wires in the harness, it is unlikely that more than one circuit will be affected by the condition.

This condition may be caused by the engine wiring harness rubbing on the front right side of the transmission. The engine harness may have chafing or damage to the wires. Contact with the edge of the transmission may result in a rub-through of the wires within that harness.

Possible Engine Harness Circuits Affected

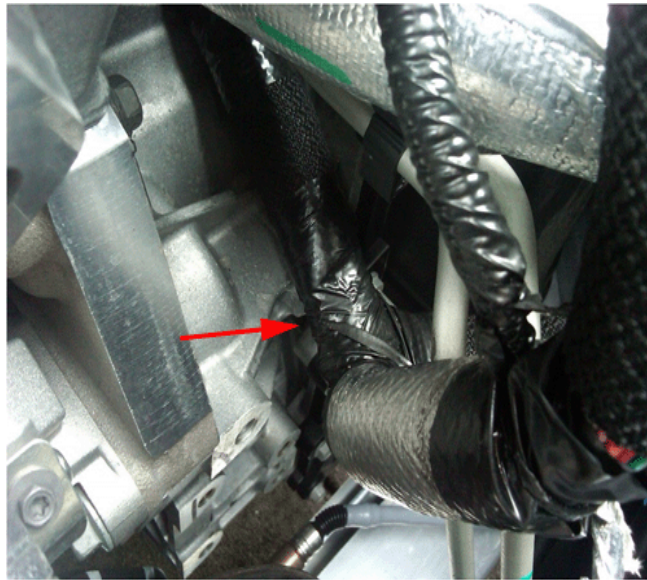
Refer to SI for circuit details.

Circuit Function	Circuit Numbers
SENSOR-MAF WITH TIAP & HUM	6289, 3201, 2760, 3200, 5294, 492, 451, 4808
MODULE-ABS	6032, 6030, 7448, 1442, 2500, 2501, 830, 872, 833, 873, 6031, 1342
SENSOR-A/C PRESSURE	380, 2700, 5514
SAI PUMP / SAI CONTROL VLV RELAYS	78, 436, 742, 5294, 415, 421, 2140, 5294
SENSOR-FUEL LINE PRESSURE	7445, 7446, 7747
SENSOR-VAC/BAR	6030, 6031, 6032
PUMP ASM-BRAKE VAC ASSIST	1050, 1470
INL-INJ ODD	4801, 4901, 4803, 4903, 4805, 4905
INL-INJ EVEN	4802, 4804, 4806, 808, 4902, 4904, 4906, 598, 2918

SAI CONTROL CHECK VLV	6456, 6455, 6454, 451, 415
INJ 1, 3, & 5	51, 5291, 2121, 2129, 2123, 2125
SENSOR-B1 KNOCK	496, 1716
SENSOR-CRANK POSITION	6270, 6271, 6272
SENSOR-B1S1 O2	3113, 3110, 3113, 5293
EXH B1	6754, 5282, 5297, 5273, 5296
INT B1	6753, 5284, 5300, 5275, 5301
SENSOR-MAP	432, 469, 2704
INLINE TO IP	17, 30, 5985, 1271, 1272, 1274, 1161, 1162, 1164, 2709, 890, 2759, 7445, 7446, 7447, 465, 7573, 7574, 1579, 5360, 5361

Recommendation/Instructions

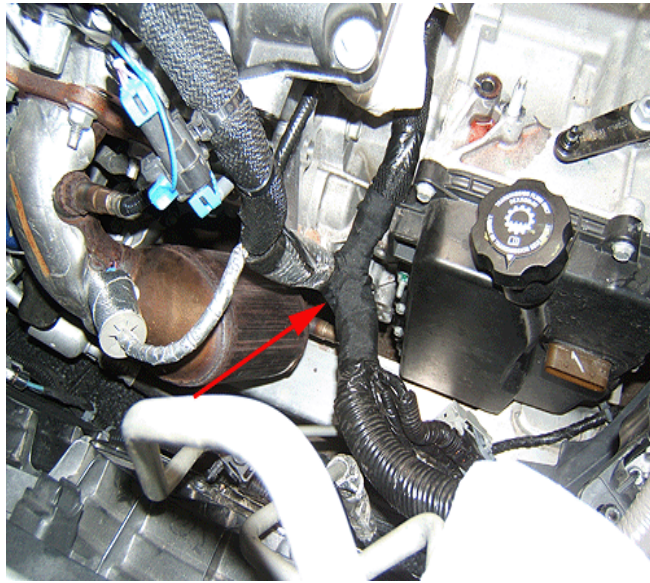
Technicians should inspect the engine harness for any damaged wires.



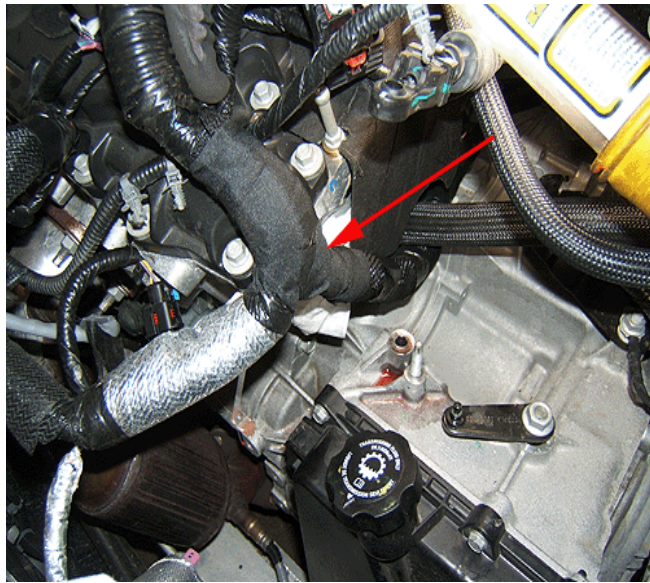
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To gain access and properly inspect the harness, do the following steps:

1. Disconnect the battery.
2. Remove the air cleaner assembly. Refer to Air Cleaner Assembly Replacement in SI.
3. Remove the radiator outlet hose from the engine side and position out of the way. Refer to Radiator Outlet Hose Replacement in SI.
4. Disconnect the fluid cooler inlet and outlet hoses from the transmission and reposition out of the way. Refer to Fluid Cooler Inlet Hose Replacement and Fluid Cooler Outlet Hose Replacement in SI.
5. Disconnect the engine control module (ECM) connectors.
6. Disconnect the harness retainer from the ECM bracket.
7. Disconnect the downstream O2 sensor.
8. Disconnect the harness retainer from the cylinder head.
9. Disconnect the engine coolant temperature sensor connector.
10. Disconnect the fuel pressor sensor connector.
11. Disconnect the transmission control module (TCM) connector.
12. Raise the vehicle.
13. Disconnect the left front wheel speed sensor and wire clips.
14. Lower the vehicle.



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15. Lift up and flip over the harness and peel the tape from the area and look for ANY damaged wires.
16. Repair the harness as necessary. Refer to Wiring Repairs in SI.
17. Wrap harness conduit around the affected area of the harness and tie strap the harness to the transmission cooler line bracket.
18. Lay the harness back in place.
19. Raise the vehicle.
20. Connect the left front wheel speed sensor and wire clips.
21. Lower the vehicle.
22. Connect the transmission control module (TCM) connector.
23. Connect the fuel pressure sensor connector.
24. Connect the engine coolant temperature sensor connector.
25. Connect the harness retainer to the cylinder head.
26. Connect the downstream O2 sensor.
27. Connect the harness retainer to the ECM bracket.
28. Connect the engine control module (ECM) connectors.
29. Connect the fluid cooler inlet and outlet hoses to the transmission.
30. Install the radiator outlet hose.
31. Install the air cleaner assembly.

32. Connect the battery.
33. Bleed the cooling system.
34. Clear any DTCs.

If chafing is not observed, refer to the appropriate diagnostic procedures in SI and tie strap the harness to the transmission cooler line to prevent the engine harness from rubbing on the transmission.

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
N9684*	Inspect Engine Wire Harness	1.3 hrs
Add	To Repair Wire Harness	0.1 to 0.3 hr
*This is a unique labor operation for bulletin use only. It will not be published in the Labor Time Guide.		

Additional Keywords: ABS, wheel speed sensor, EBCM, service brake assist, traction control, Stabilitrak, P0010 P0011 P0013 P0014 P0016 P0017 P0018 P0019 P0020 P0021 P0023 P0024 P0089 P0090 P0091 P0092 P00C6 P00C8 P00C9 P00CA P0116 P0117 P0118 P0119 P0121 P0122 P0123 P0128 P0178 P0179 P018B P018C P018D P0191 P0192 P0201 P0202 P0203 P0204 P0205 P0206 P0221 P0222 P0223 P0231 P0232 P025A P0261 P0262 P0264 P0265 P0267 P0270 P0271 P0273 P0274 P0276 P0277 P0340 P0341 P0342 P0343 P0345 P0390 P0391 P0392 P0393 P0411 P0420 P0430 P0442 P0443 P0446 P0449 P0451 P0452 P0453 P0454 P0455 P0461 P0462 P0463 P0464 P0480 P0481 P0496 P0506 P0507 P050D P0513 P0521 P0522 P0523 P0532 P0533 P0560 P0562 P0563 P0564 P0567 P0568 P0572 P0573 P0575 P0615 P0621 P0622 P0627 P0628 P0629 P0645 P064A P0650 P0651 P0658 P0659 P0667 P0668 P0669 P069E P1248 P1249 P124A P124B P124C P124D P1255 P1258 P1629 P1631 P1632 P163A P16A0 P16A1 P16A2 P2096 P2097 P2098 P2099 P2122 P2135 P2138 P2147 P2148 P2150 P2151 P2153 P2154 P2156 P2157 P216B P216C P216E P216F P2635