



Service Bulletin

Bulletin No.: 21-NA-149

Date: March, 2023

TECHNICAL

Subject: Engine Wire Harness Chafing / IPC Gauges Sweep / IPC Warning Message / SES/Check Engine/MIL / No Start / No Crank / Runs Rough / Stalls / Reduced Engine Power / Various DTCs

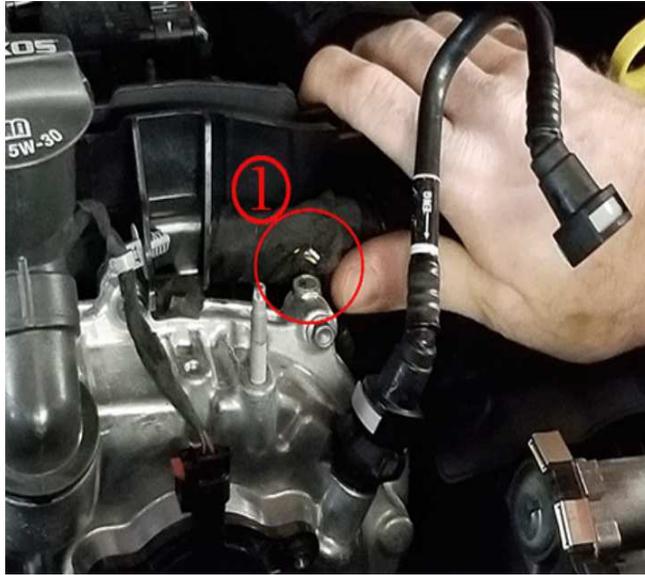
This bulletin replaces PIT5677E, PIT5713A, PIT5751C and PIT5742. Please discard PIT5677E, PIT5713A, PIT5751C and PIT5742.

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Cadillac	Escalade Models	2021	2023			Equipped with 5.3L L84 and L87, 2.7L L3B or 3.0L LM2	MQE, MYC, MQB
Chevrolet	Silverado 1500 (New Model)	2019	2019			Equipped with 5.3L L82, 5.3L L84, 6.2L L87, 4.3L LV3, 2.7L L3B, or 3.0L LM2	
	Silverado 1500	2020	2021				
	Silverado 1500 - (LTD, RPO J21, 12th VIN Digit = 4 or less)	2022	2022				
	Suburban	2021	2023			Equipped with 5.3L L84 and L87, 2.7L L3B or 3.0L LM2	
	Tahoe	2021	2023			Equipped with 5.3L L84 and L87, 2.7L L3B or 3.0L LM2	
GMC	Sierra 1500 (New Model)	2019	2019			Equipped with 5.3L L82, 5.3L L84, 6.2L L87, 4.3L LV3, 2.7L L3B, or 3.0L LM2	
	Sierra 1500	2020	2021				
	Sierra 1500 - (Limited, RPO J21, 12th VIN Digit = 4 or less)	2022	2022				
	Yukon Models	2021	2023			Equipped with 5.3L L84 and L87, 2.7L L3B or 3.0L LM2	

<p>Involved Region or Country</p>	<p>United States, Canada, Mexico, Middle East, Chile, Paraguay, Uruguay, Thailand, Australia and New Zealand.</p>
<p>Important: Service agents must comply with all International, Federal, State, Provincial, and/or Local laws applicable to the activities it performs under this bulletin, including but not limited to handling, deploying, preparing, classifying, packaging, marking, labeling, and shipping dangerous goods. In the event of a conflict between the procedures set forth in this bulletin and the laws that apply to your dealership, you must follow those applicable laws.</p>	
<p>Condition 1</p>	<p>This Condition pertains to vehicles equipped with engine 2.7L, L3B only. Some customers may comment on any of the following concerns:</p> <ul style="list-style-type: none"> – SES MIL – No Start – No Crank – Engine runs rough – Reduced engine power – Erratic speedometer operation – Blown Fuse(s): F46UA, F47UA, F51UA, F78UA, F85UA, F86UA, F87UA, and/or F90UA <p>When checking for DTC's, any combination of the following codes may be found: C15AA P001A P2B00 P2B01 P2B03 P2B96 P001B P003D P0107 P018C P01E5 P01E6 P01E7 P0237 P0340 P0341 P0355 P0365 P037C P03F0 P0521 P0480 P0522 P0532 P0606 P0616 P0691 P0692 P0711 P0712 P077C P07BF P0707 P1101 P112F P146D P159F P16A0 P16A2 P2122 P26E5 P2812 P2814 P2B33 P2B34 P2B53 P2C05 P2C08 P2C09 P2C0C P2C0D P2C10 P2C12 P2C15 P2C16 P2C19 P305E P3084 P3089 P308E P3093 P3094 P3095 P3098 P30B0 P30B3 P30CF U0073 U0100 U0101 U0140 U0644 U0672</p> <p>Determine if fuse F46UA only is affected; confirm K68 Trailer Lamp Control Module functionality using # 20–NA-198; Trailer Running Lights shut Off Due to Excessive Load on the Running Lamp Circuit — (April 7, 2021), # PIT5747A; Diagnostic Tip — Trailer Lighting Complaints With Trailering App RPO U1D.</p>
<p>Condition 2</p>	<p>This Condition pertains to vehicles equipped with engine 4.3L, LV3 only. Some customers may comment on any of the following issues:</p> <ul style="list-style-type: none"> • IPC gauges sweeping while driving • Several IPC warning messages and MIL displayed • No Start • No Crank • Runs rough • Stalls • Blown Fuse(s): F66UA, F72UA, F46UA, F78UA, F86UA, F88UA, F91UA, F87UA, and/or F90UA <p>– Any combination of the following DTC's:</p> <p>B2B0D B2B0E C2A07 P0010 P0011 P0030 P0031 P0032 P0036 P0037 P0038 P0050 P0051 P0052 P0053 P0054 P0056 P0057 P0058 P0059 P0060 P0090 P0091 P0092 P0097 P0098 P0099 P00F4 P00F5 P00F6 P0101 P0102 P0103 P0106 P0107 P0108 P0112 P0113 P0114 P0116 P0117 P0118 P0119 P0121 P0121 P0123 P018B P018C P018D P0191 P0192 P0201 P0202 P0203 P0204 P0205 P0206 P0207 P0208 P0222 P0223 P0300 P0335 P0340 P0351 P0352 P0353 P0354 P0355 P0356 P0357 P0358 P0443 P0449 P0451 P0452 P0453 P0454 P0458 P0459 P0480 P0498 P0499 P057B P057C P057D P057E P058A P058B P058C P058D P058E P058F P0615 P0616 P0617 P0621 P0622 P0641 P0650 P0651 P0685 P0686 P0687 P0689 P0690 P0691 P0692 P0697 P06A3 P0700 P1007 P1176 P1177 P124 P1248 P1249 P124A P124B P124C P124C P124D P124D P124E P124F P127C P128A P128B P129B P129C P129D P135A P157A P15A0 P1682 P16A0 P16A1 P16A2 P16A7 P16AF P16B3 P16BC P16BD P16BF P16D4 P16D5 P16D6 P16D7 P16D8 P16D9 P16DC P16DD P16DE P16DF P16E1 P16E2 P16E3 P16E4 P16E5 P2088 P2089 P2122 P2123 P2127 P2128 P2135 P2138 P2147 P2148 P2150 P2151 P2153 P2154 P2156 P2157 P216B P216C P216E P216F P217B P217C P217E P217F P2228 P2230 P227C P227D P263A P263B P26E4 P26E5 P26E6 P3051 P3052 P3053 P3054 P3055 P3056 P3105 P3106 P3108 P3109 P310B P310C P310E P310F P3111 P3112 P3114 P3115 P3117 P3118 P311A P311B P3400 P3401 P3403 P3404 P3409 P3411 P3412 P3417 P3419 P3420 P3425 P3427 P3428 P3433 P3435 P3436 P3441 P3443 P3444 P3449 P3451 P3452 P3452 P3457 P3459 P3460 P3498 P3499 P349A P349B P349C P349D P349E U0073 U0100 u0101 u0121 u0128 U0129 u0131 U0140 U0146 U0422 U0632 U0633 U1345 U1346 U1347 U1348 U1349 U1501 U1502 U1503 U1510 U1511 U01B0 U18D5 U1814 U2413</p> <p>In most cases, powertrain movement will duplicate the issue, such as, shifting between drive and reverse, accelerating, braking or just driving.</p>

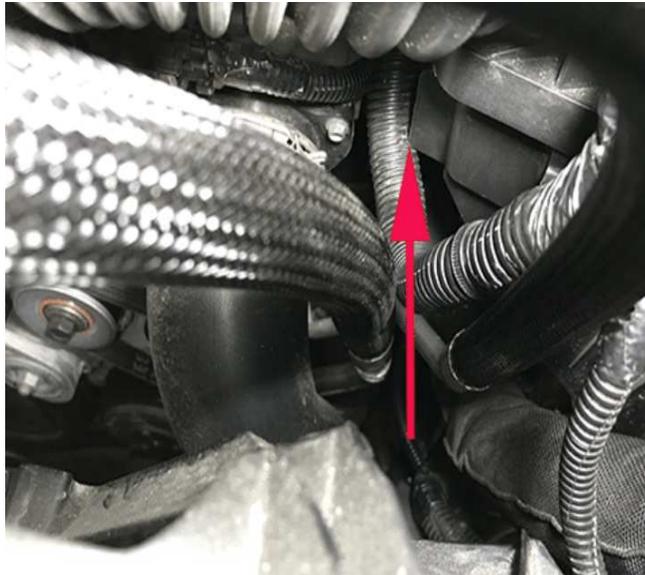
<p>Condition 3</p>	<p>This Condition pertains to vehicles equipped with engine 3.0L LM2 only. Some customers may comment on any of the following concerns:</p> <ul style="list-style-type: none"> – Engine runs rough – Misfires – Low Power – SES MIL – Blown Fuses: F46UA, F78UA, F86UA, F87UA, and/or F90UA – Any combination of the following DTC's: <p>C118D P0016 P0045 P0046 P0048 P007B P007C P007D P007E P0087 P0089 P0090 P0091 P0092 P0096 P0097 P0098 P0099 P00C7 P00C9 P00CA P00DF P00E0 P00E1 P00E2 P00E9 P00EA P00EB P00EC P00F4 P00F5 P00F6 P0101 P0102 P0103 P0106 P0107 P0108 P0111 P0112 P0113 P0114 P0117 P0119 P017B P017C P017D P017E P0181 P0182 P0183 P0184 P018B P018C P018D P0191 P0192 P0193 P01E5 P01E6 P01E7 P0201 P0202 P0203 P0204 P0205 P0206 P0216 P0228 P0261 P0262 P0264 P0265 P0267 P0268 P0270 P0271 P0273 P0274 P0276 P0277 P02E0 P02E3 P02E8 P02E9 P02EB P030 P0300 P0301 P0302 P0304 P0305 P0306 P0335 P0336 P0340 P0341 P037A P037B P0381 P0403 P0405 P0406 P041B P041C P041D P041E P044C P044D P045A P045D P0475 P0478 P048D P048D P048E P048E P0490 P04CF P04D0 P04D1 P04D2 P04DB P04E2 P04E3 P04FB P0545 P0546 P057B P057C P057D P057E P0628 P0629 P0641 P0650 P0651 P066A P066B P066C P066D P066E P066F P0671 P0672 P0673 P0674 P0675 P0676 P067A P067B P067C P067D P067E P067F P0685 P0686 P0687 P0689 P0690 P0697 P06A3 P1004 P1005 P1006 P1007 P100F P1018 P1019 P101B P101C P101D P101E P1096 P1097 P1098 P109F P10A0 P10A1 P10A2 P10C0 P10C1 P10D5 P10D6 P10D7 P10D8 P10E6 P10E7 P10E8 P10EA P10EB P10EC P10ED P113B P113C P113D P115E P115F P1160 P116A P116B P116C P116D P116E P116F P118A P118B P1192 P1193 P1194 P119A P119B P119C P119D P119E P119F P11B3 P11BE P11BF P11C0 P11C5 P11C6 P11C7 P11C8 P11C9 P11CC P11D0 P11D1 P11D2 P11D3 P11D5 P11D8 P11D9 P11DA P11DB P11DC P11FC P11FD P11FE P122B P122C P1248 P1249 P124A P124B P124C P124D P127C P127D P129D P12A6 P131B P131C P1388 P1389 P138A P1402 P1407 P140F P1419 P141A P141B P141C P1424 P1425 P1474 P1475 P1476 P1477 P1478 P1479 P147B P1488 P14A7 P14A8 P14A9 P14AA P14AB P14AC P14AD P14AE P14AF P14B0 P14B1 P14B2 P14B3 P14B4 P14D9 P14DA P163A P163B P1682 P169E P169F P16AD P16AE P16BC P16BD P16BF P16FA P16FC P2008 P2009 P2010 P2016 P2017 P201B P2032 P2033 P203B P203C P203D P206B P206C P206D P2080 P2081 P2084 P2085 P2122 P2123 P2127 P2128 P2138 P2147 P2148 P2150 P2151 P2153 P2154 P2184 P2185 P2186 P21C5 P2202 P2203 P2205 P2206 P2207 P2208 P2209 P220A P220B P2210 P2211 P2227 P2228 P2229 P2230 P2264 P227B P227C P227D P227E P228B P228C P228D P2293 P2294 P2295 P2296 P2297 P22A0 P22A1 P22A3 P22A4 P22A5 P22A6 P22A7 P22A8 P22A9 P22AB P22AC P22AD P22B2 P22B6 P22B7 P22FE P233A P233B P233C P2381 P2382 P2383 P2384 P23AE P23AF P23B1 P23B2 P23B3 P23B4 P23B5 P23B6 P23B8 P23B9 P23C1 P242B P242C P242D P242E P2452 P2453 P2454 P2454 P2455 P2456 P24B0 P24B1 P24B3 P24B4 P24B5 P24B6 P24C7 P24D0 P24D1 P2564 P2565 P2599 P2627 P2628 P263A P263B P26B7 P26B8 P26B9 P26BB P26C0 P26C2 P26FA P2A00 P2A01 P2A02 P2ADA P2ADC P2ADD P2AFE P2AFF P2B2D P2B2E P2B58 P2B59 P2B5B P2B5C P2B5E P2B5F P2B98 P2B99 P2BA0 P2BB4 P2BB5 P2C3A P2C3B P2C3C P2C3D P2C48 P2C63 P2C64 P2C65 P3196 P3198 P3199 U0100 U0101 U0121 U0140 U02A1 U060F U0617 U062F U063F U064F U0650 U0651 U0653 U0654 U0656 U111A U2627 U2628 U2630, P0404 P0476 P048A P28F7 P140B.</p> <p>Determine if fuse F46UA only is affected; confirm K68 Trailer Lamp Control Module functionality using # 20–NA-198; Trailer Running Lights shut Off Due to Excessive Load on the Running Lamp Circuit — (April 7, 2021), # PIT5747A; Diagnostic Tip — Trailer Lighting Complaints With Trailering App RPO U1D.</p>
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<p>Condition 4</p>	<p>This Condition pertains to vehicles equipped with engines 5.3L L82, 5.3L L84, 6.2L L87, 4.3L LV3, 2.7L L3B, or 3.0L LM2.</p> <p>Some customers may comment on one or more of the following conditions:</p> <ul style="list-style-type: none"> • Check Engine light illuminated • SES MIL • Reduced Engine Power (REP) • Reduced Power Steering Assist • Transmission shifting erratically or not shifting • No start • No crank • Engine runs rough • Vehicle stalls • Blown Fuse(s): F46UA, F78UA, F86UA, F88UA, F87UA, F90UA, F60UA, F67UA, and/or F91UA <p>When checking for DTC's there may be any of the following:</p> <p>P0101 P0103 P0106 P0108 P0300 P0562 P0615 P0617 P0641 P0689 P0700 P12A6 P15A0 P216E P1682 P16BD P16BC P2147 P06A3 P349P P2B96 U0073 U0078 U0100 u0101 U0102 u0121 u0128 U0129 u0131 U0140 U0146 U0184 U0422 U1345 U1346 U1347 U1348 U1349 U1501 U1502 U1503 U1510 U1511 U01B0 U18B4 U18D5 U2413 P305B P1007 B2B0E P2535, P0480</p> <p>Determine if fuse F46UA only is affected; confirm K68 Trailer Lamp Control Module functionality using # 20-NA-198; Trailer Running Lights shut Off Due to Excessive Load on the Running Lamp Circuit — (April 7, 2021), # PIT5747A; Diagnostic Tip — Trailer Lighting Complaints With Trailering App RPO U1D.</p>
<p>Cause 1</p>	<p>This Cause pertains to vehicles equipped with engine 2.7L, L3B only.</p> <p>These concerns may be caused by engine harness contact with under hood components.</p> <p>Caution: This Document Only Applies To VINs NOT Covered by Customer Satisfaction Program N192219370 Please Verify In VIS Before Proceeding</p> <p>Shown below are areas that should be inspected for this concern.</p> <p>Inspect the engine harness as it crosses over top of the Camshaft Carrier Cover.</p> <p>Harness damage can occur at any point across the Camshaft Carrier Cover.</p> <p>Typical inspection locations shown below.</p>  <p style="text-align: right;">5394681</p> <p>Example of engine wiring harness damage at Camshaft Carrier Cover shown below.</p>



5324748

Inspect the engine harness at the Lower Air Cleaner Housing as shown below.



5394683

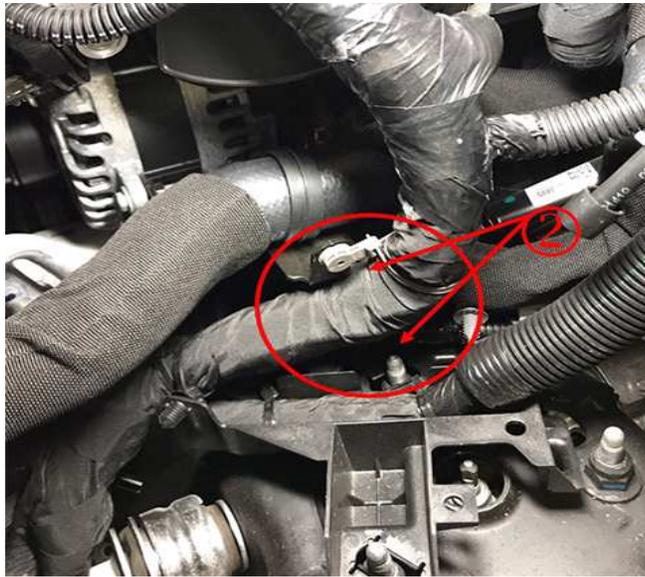
Example of engine harness damage, Lower Air Cleaner Housing removed shown below. Inspect the engine harness at the Generator Bracket and Left Front Coil Spring stud as shown below.

Note: Under normal driving conditions, the engine will rock back and forth in its mounts.

This may result in harness contact with this bracket that may not be present during engine off inspections.

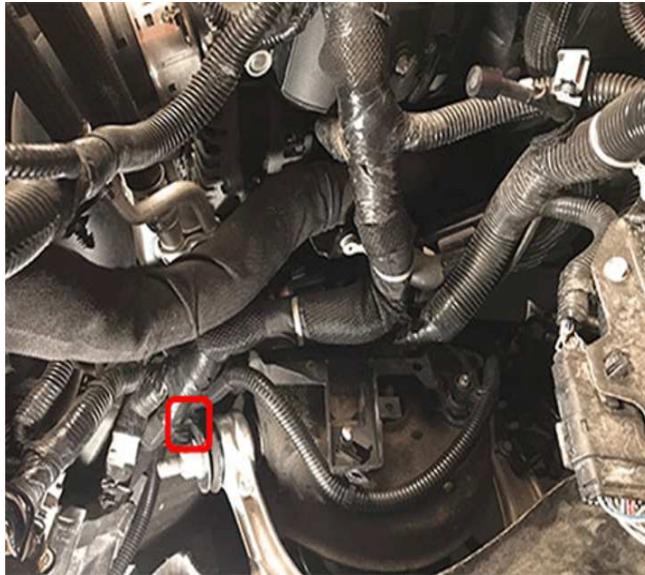
Careful visual inspections are necessary to isolate areas of contact.

It may be necessary to disconnect several engine harness connections to reposition the harness for inspections.



5324752

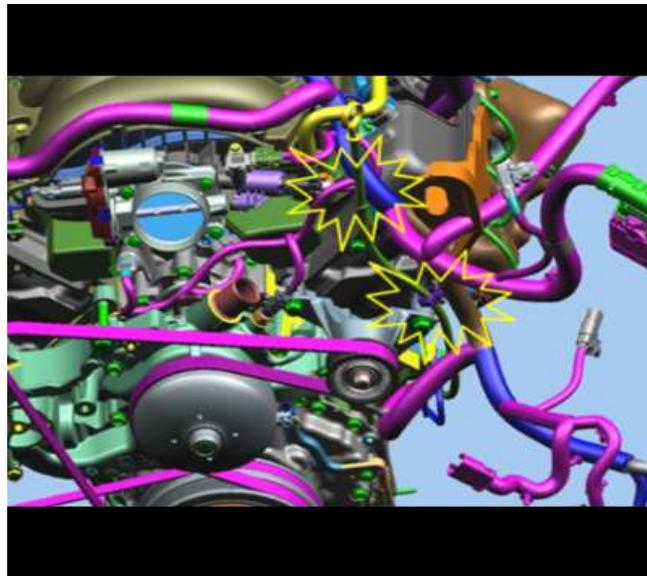
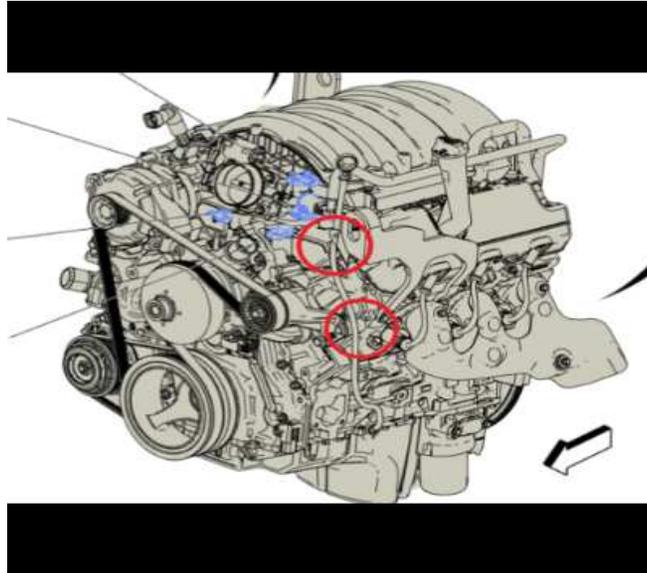
Inspect the engine harness at the Left Front Upper Control Arm Bushing as shown below.



5394677

Cause 2

This Cause pertains to vehicles equipped with engine 4.3L, LV3 only.



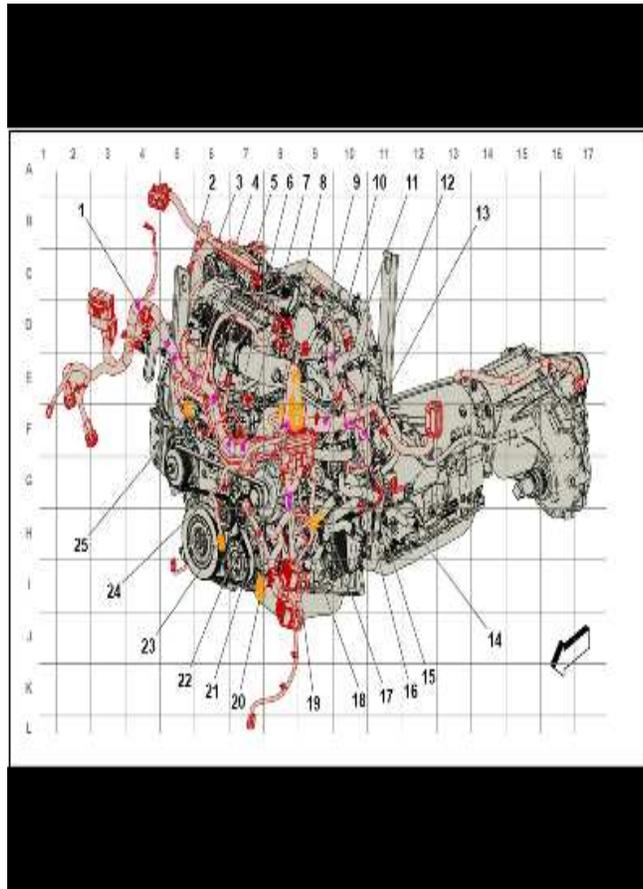
6163831

6163832

These concerns could be caused by engine wiring harness chafe on underhood components at various locations such as: Front corner of the left hand cylinder head, drive belt idler pulley bracket, or oil dipstick bracket; noted by the circled and starred areas in the graphics above.

This harness chaffing could cause shorting of any number of circuits to ground. Due to the number of circuits in the harness, there is a wide variety of different symptoms that could occur depending on which circuit(s) are damaged.

This Cause pertains to vehicles equipped with engine 3.0L, LM2 only.
For any of the DTC's listed in Condition # 3 above, inspect the following areas



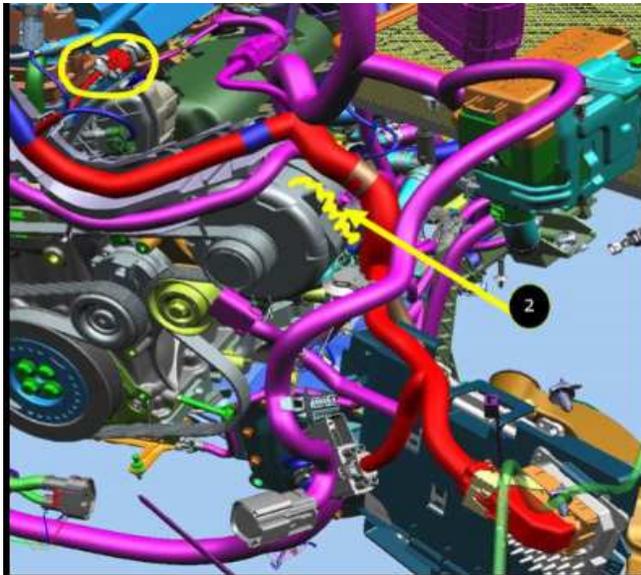
Cause 3

6163833

1. The engine harness pinched/shorted/chaffed at grid coordinates G-8, as shown above. This location is approximately 18 inches from the ECM connectors (1) and on top of the generator (2), as shown below. Due to the number of circuits in the harness, there is a wide variety of different symptoms that could occur, depending on which circuit(s) are damaged.



5628370



5643648

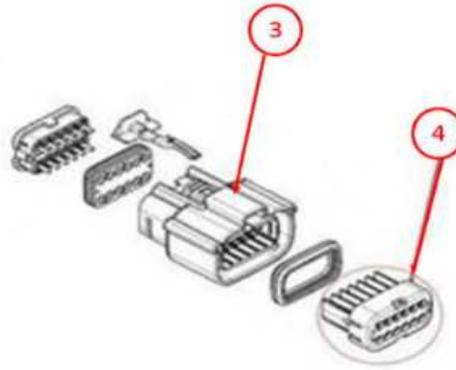
2. The engine harness shorted/chaffed at grid coordinates C-9, as shown above. The engine harness could be shorted out on the PVC hose clamp at the crankcase pressure regulator, as shown below (6). This is located approximately 4 inches from the crankcase sensor connector pigtail harness breakout.



5694712

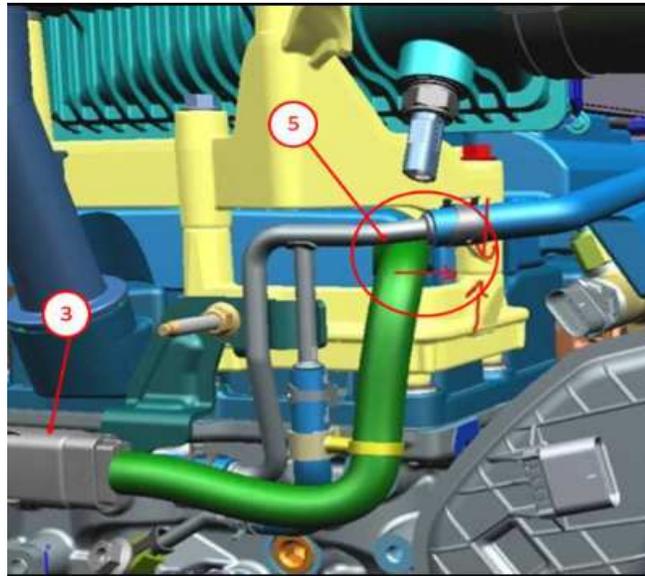
For DTC's: P0201, P0202, P0203, P0204, P0205, P0206, and/or P0216 inspect the following 3 areas:

1. Inspect for poor terminal tension at connector X160, shown in the grid above, as callout 25. While inspecting X160 make sure the terminal locking feature (4), shown below, is not missing.



5643650

2. Inspect the fuel injector connectors to make sure they are fully connected/seated.
3. Inspect the fuel injector wiring harness near the X160 connector (3) for being pinched/shorted/chaffed, as shown below (5).



5643651

For DTC's: P2382, P2383, P11CC, P11D5, P1488, P14D9, and/or P23AF inspect the following area:

Note: More force may sometimes be required to find a damaged circuit. The field has reported, gentle pulling is sometimes not enough, in some cases.

1. Inspect the exhaust pressure differential sensor harness at the connector. The circuits may appear good, and test within a proper reading.
2. Pull on the individual wires. This will sometimes cause 1 or 2 wires to break at the connector.
3. After installing the new connector, we advise adding extra tape to limit the movement/vibration of the harness at the connector.

Cause 4

This Cause pertains to vehicles equipped with engines 5.3L L82, 5.3L L84, 6.2L L87, 4.3L LV3, 2.7L L3B, or 3.0L LM2.



5583331



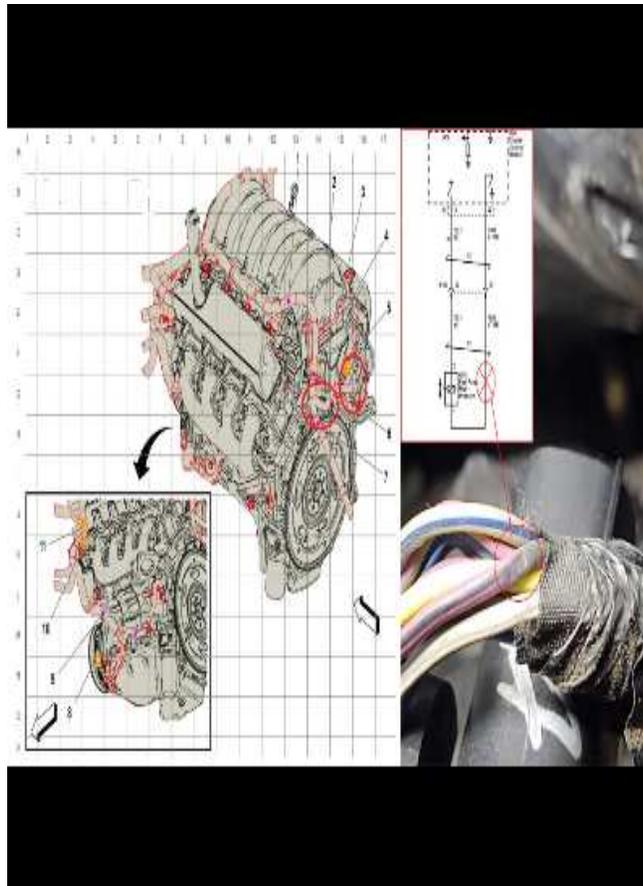
Examples of extreme wire chaffing.

5868347



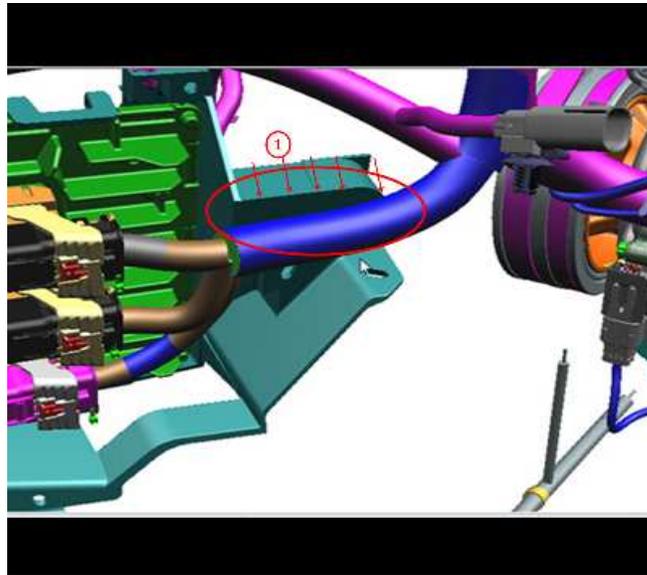
An example of firewall insulator chaffing

5949751



Other areas of concern.

5949755



5583328

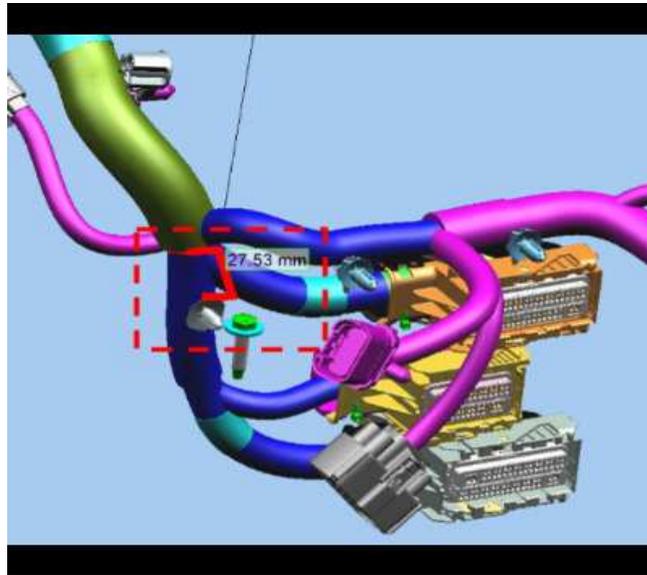


5583329

The cause of the condition may be an engine wire harness clip was removed during production due to ergonomic issues (hand clearance and branch stiffness). This led to an uncontrolled branch that came into contact with a sharp edge (1) & (2) on the ECM/TCM bracket, driver side upper control arm, and/or shock tower and caused chaffing during engine vibration and roll.

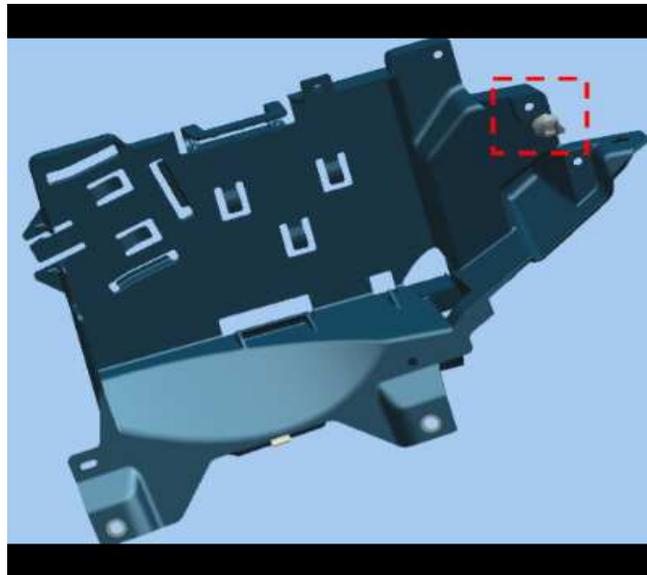
Correction 1

This Correction pertains to vehicles equipped with engine 2.7L, L3B only.
Caution: This Document Only Applies To VINs NOT Covered by Customer Satisfaction Program N192219370 Please Verify In VIS Before Proceeding
 If engine wiring harness contact is isolated during inspection, use a seam ripper type tool to carefully inspect for internal wiring damage.
 If found, repair the damaged wiring following the SI wire to wire repair procedures.
 Once the engine wiring harness inspections or repairs have been made, perform the following updates to the engine wiring harness.
 Protect the engine wiring harness from future damage at the ECM Bracket.
 Install a Zip Tie Fir Tree Clip GM PN 84389052, 28 millimeters below the branch break out from above as shown below.



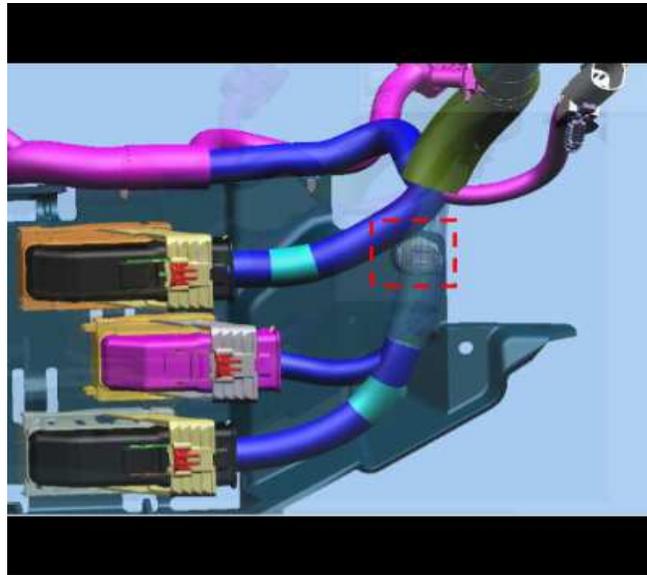
5810432

Insert the Zip Tie style Fir Tree Clip into the location shown below in the ECM Mounting Bracket.



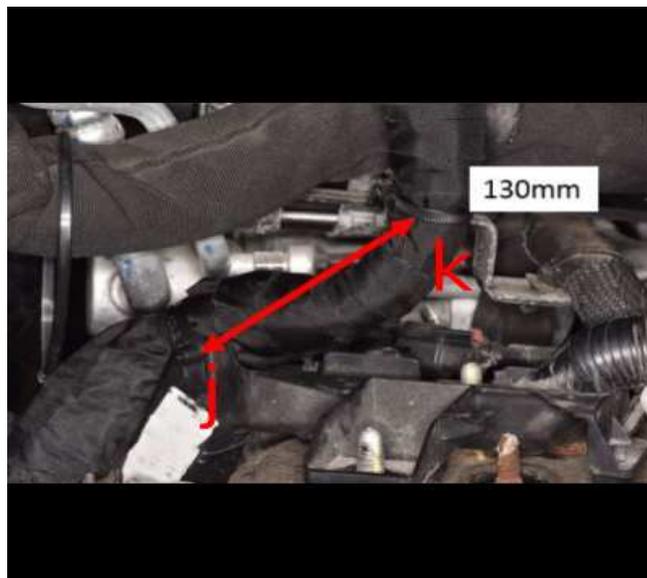
5810431

Zip Tie Fir Tree Clip installed securing the harness as show below.



5810433

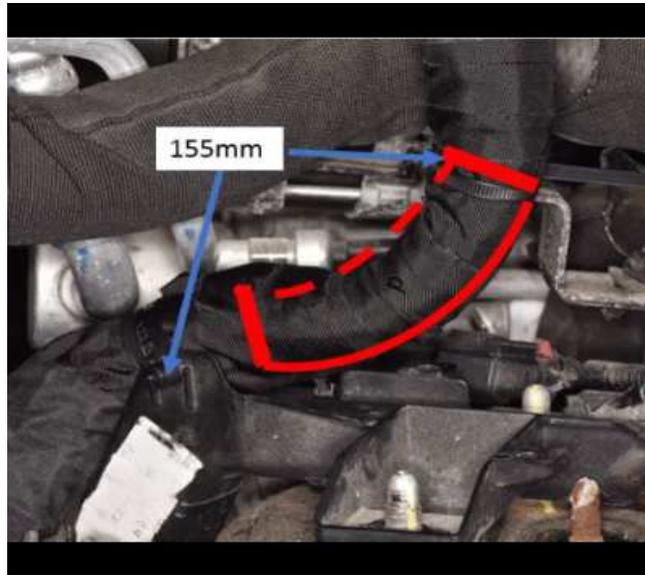
Protect the engine wiring harness from future damage at Generator Bracket. Zip Tie style Fir Tree Clips are located on the plastic Channel at #1 and on the Generator Bracket at #2 shown below



5810435

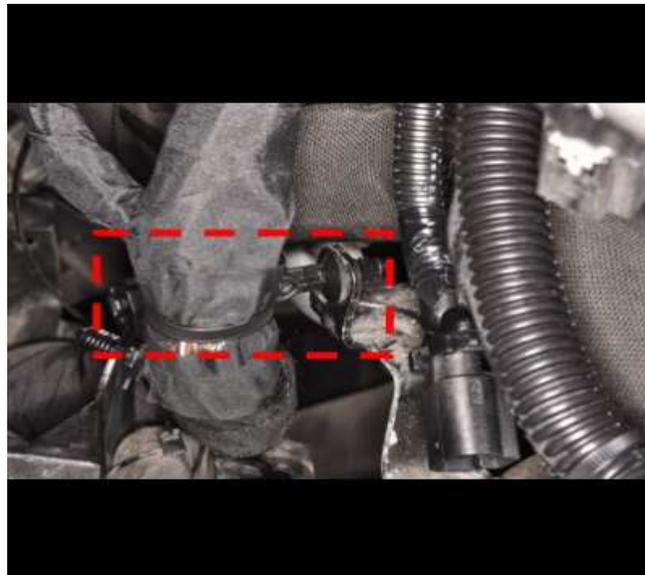
Measure up 155 mm from the Zip Tie style Fir Tree Clip located on the plastic Channel. Install the Kevlar Velcro Sleeve PN 84820678 155 mm up the engine wiring harness as shown below to ensure that the sleeve extends 25mm above the Zip Tie style Fir Tree Clip located at the Generator Bracket as shown below.

Tape both ends of the Kevlar Velcro Sleeve with Woven Polyester (PET) Electrical/Anti-Abrasive Tape using KENT® AUTOMOTIVE 1089482 to secure in place.



5810434

Install the updated Zip Tie style Fir Tree Clip GM PN 13596790 in the Generator Bracket as shown below.



5810436

Protect the engine wiring harness from future damage at the top of the Camshaft Carrier Cover in the area shown below (1).

Install Kevlar Velcro Sleeve PN 84826758 and tape both ends with Woven Polyester (PET) Electrical/Anti-Abrasive Tape using KENT® AUTOMOTIVE 1089482 to secure in place.



5812564

This Correction pertains to vehicles equipped with engine 4.3L, LV3 only.
Note: The first graphic below is a before, and after (2), repair example of harness chaffing at the Oil Dipstick bracket.

Correction 2



5911722



5412204



5412208

To correct this concern, repair the damaged wiring following the SI wire-to-wire repair procedures. Once repaired, protect and reposition the engine wiring harness to prevent future harness damage.

Correction 3

This Correction pertains to vehicles equipped with engine 3.0L, LM2 only.

Inspect areas designated by the graphics and call-outs in Cause # 3.

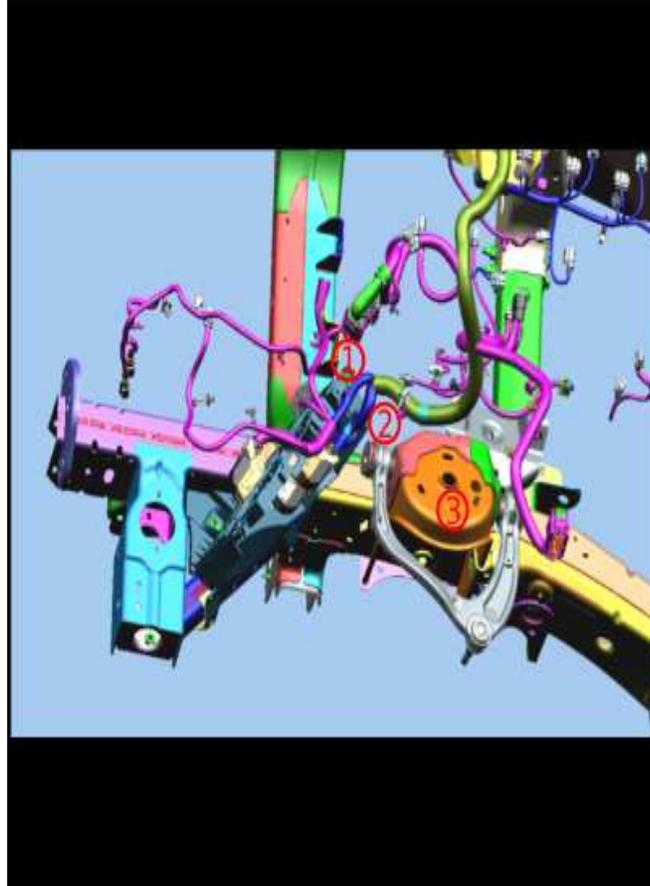
In many cases, the ECM has been unnecessarily replaced for these concerns. Please thoroughly inspect the areas shown above and follow published SI diagnostics before any parts are replaced. If any concerns are found, then follow SI Wiring and Connector repair instructions to correct the concern.

Correction 4

This Correction pertains to vehicles equipped with engines 5.3L L82, 5.3L L84, 6.2L L87, 4.3L LV3, 2.7L L3B, or 3.0L LM2.

Utilizing Engine Harness sleeves, anti-abrasion tape, and zip-ties to secure the harness away from one or more of the chaffing points. Follow the Service Procedure steps below.

1. Lift and support the vehicle. Refer to *Lifting and Jacking the Vehicle* in SI.
2. Remove driver side tire and wheel and driver wheelhouse liner. Refer to *Tire and Wheel Removal and Installation*, and *Front Wheelhouse Liner Replacement* in SI.



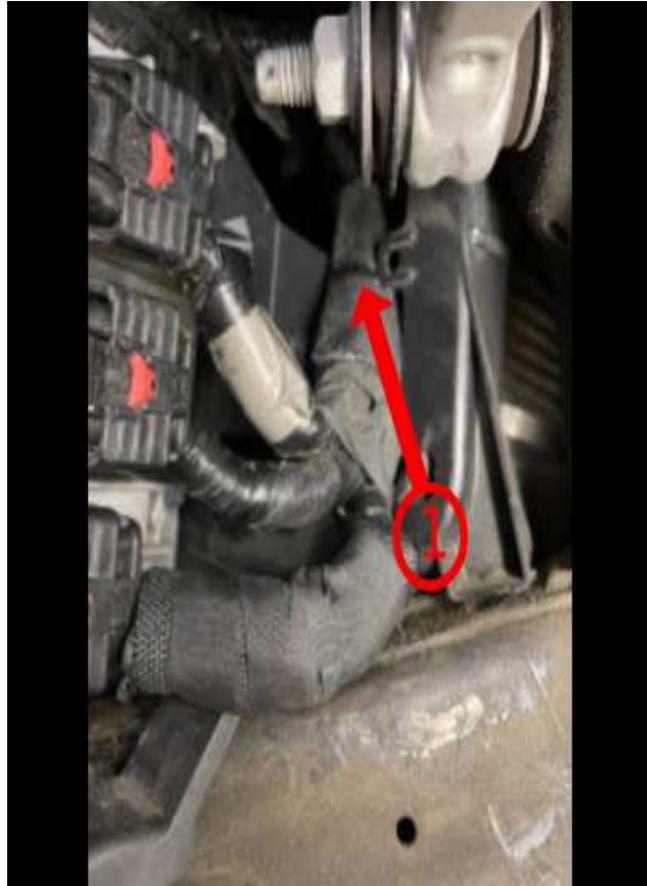
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3. Locate the three contact points where the wire harness is chaffing, the ECM/TCM black bracket (1), the upper control arm (2), and the shock tower bolt (3).



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4. At the ECM/TCM bracket, locate the wire harness laying against the ledge (1).



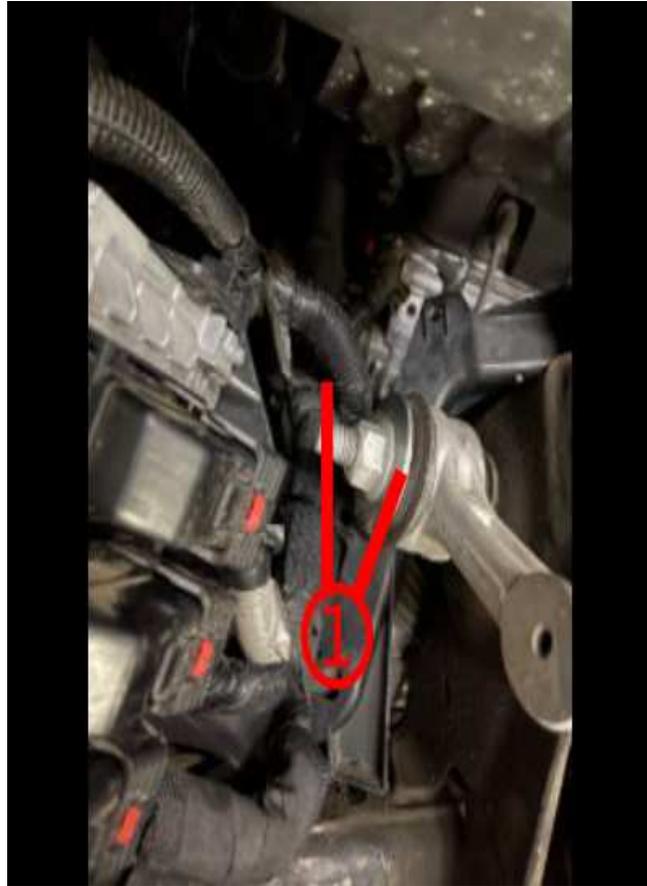
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5. Wrap the wire harness with the shorter Engine Harness Sleeve then utilizing zip ties and two small holes in the bracket (1).



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6. Secure the harness snug to the bracket to prevent movement.



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7. At the upper control arm (1), secure the harness away from control arm (example above shows harness in the correct position, unwrapped).



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8. Wrap the harness in the shorter Engine Harness Sleeve then wrap with anti-abrasion tape secure it to the harness clip above the ECM/TCM bracket (1) to keep out of the way of the upper control arm.



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9. At the shock tower point there is a wire harness canal (1).



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10. Using the long Engine Harness Sleeve, wrap the harness and secure it snug to the canal using zip-ties.



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11. Verify the wire harness is wrapped and secured at all three points, the ECM/TCM Bracket (1), Upper Control Arm (2), and the Shock Tower (3). Then reassemble the vehicle.
12. Reinstall the front wheelhouse liner and tire and wheel. Refer to *Front Wheelhouse Liner Replacement* and *Tire and Wheel Removal and Installation* in SI.
13. Remove the support and lower the vehicle.

Parts Information

Correction 1

Causal Part	Part Number	Description	Qty
N/A	KENT® AUTOMOTIVE 1089482	Woven Polyester (PET) Electrical/ Anti-Abrasive Tape	1
	84389052	ECM BRACKET CLIP	3
	84820678	KEVLAR VELCRO SLEEVE	1
	84826758	KEVLAR VELCRO SLEEVE	1
	13596790	GENERATOR BRACKET CLIP	1

Parts Information

Correction 4

Causal Part	Description	Part Number	Qty
N/A	KENT® AUTOMOTIVE 1089482	Woven Polyester (PET) Electrical/ Anti-Abrasive Tape	As needed
	Engine Harness Sleeve	84820678	
	Engine Harness Sleeve	84826758	
	Tie Strap	12337820	
	Black Push Pin Tie Strap	84396606	

Warranty Information

For vehicles repaired under the Bumper-to-Bumper coverage (Canada Base Warranty coverage), use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation	Description	Labor Time
5480728*	Inspect Harness for Chafing and Damage and Repair Correction 1	1.2 hr
	Correction 2 and 3	For vehicles repaired under warranty, submit the appropriate labor operation for the repair performed.
5486188*	Wrap and Secure Engine Wire Harness - Correction 4	1.3 hr

*This is a unique Labor Operation for Bulletin use only.

Additional SI Keywords

C15AA, P171B, P281B, P001A, P2B00, P2B01, P2B03, P2B96, P001B, P003D, P0107, P018C, P01E5, P01E6, P01E7, P0237, P0300, P0340, P0341, P0355, P0365, P037C, P03F0, P0480, P06DA, P06DB, P06DD, P0621, P0622, P0521, P0522, P0532, P0P0616, P0691, P0692, P0711, P0712, P077C, P07BF, P0707, P0960, P0962, P0963, P0964, P0966, P0967, P0968, P0970, P0971, P1101, P112F, P146D, P159F, P16A0, P16A2, P176C, P2122, P26E5, P2812, P2814, P2B53, P2C05, P2C08, P2C09, P2C0C, P2C0D, P2C10, P2C12, P2C15, P2C16, P2C19, P305E, P3084, P3089, P308E, P3093, P3094, P3095, P3098, P30B0, P30B3, P30CF, P0010, P0011, P0013, P0014, P0016, P0017, P001A, P001B, P001C, P002A, P002B, P002C, P0030, P0031, P0032, P0033, P0033, P0034, P0035, P0036, P0037, P0038, P0054, P0068, P0089, P0090, P0091, P0092, P0096, P0097, P0098, P0099, P00C6, P00C8, P00C9, P00CA, P00E9, P00EA, P00EB, P00EC, P00F4, P00F5, P00F6, P0101, P0102, P0103, P0106, P0107, P0108, P0111, P0112, P0113, P0114, P0117, P0118, P0119, P0121, P0121, P0122, P0122, P0123, P0123, P0131, P0131, P0132, P0132, P0135, P0137, P0141, P015A, P015A,

P015B, P015B, P0182, P0183, P0187, P0188, P018C, P018D, P0191, P0192, P01E5, P01E6, P01E7, P0201, P0202, P0204, P0222, P0222, P0223, P0223, P0237, P0238, P0245, P0246, P0261, P0262, P0264, P0265, P0267, P0268, P0270, P0271, P0324, P0325, P0326, P0327, P0328, P0330, P0331, P0332, P0333, P0335, P0340, P0341, P0351, P0352, P0353, P0354, P0365, P0366, P03EC, P03ED, P03EE, P03F1, P03F2, P03F3, P0443, P0449, P0451, P0452, P0453, P0454, P0458, P0459, P0498, P0499, P057B, P057D, P057D, P057E, P0606, P0641, P0650, P0651, P0685, P0686, P0687, P0689, P0690, P0697, P06A3, P06B6, P06B7, P1007, P1029, P102A, P102B, P1038, P103A, P103B, P103C, P1096, P1097, P109F, P10A0, P10A1, P10A2, P10E8, P1101, P111F, P1176, P1177, P1178, P1179, P118A, P11C9, P1248, P1249, P124A, P124B, P126E, P126F, P127C, P128A, P128B, P129D, P135A, P1469, P146A, P146D, P146E, P148E, P148F, P157A, P1682, P16A0, P16A0, P16A1, P16A1, P16A2, P16A2, P16A7, P16AF, P16B3, P16D7, P16D8, P16D9, P16E4, P16E5, P20C5, P20C8, P2088, P2089, P2090, P2091, P2122, P2123, P2127, P2128, P2135, P2135, P2138, P2147, P2148, P2150, P2151, P2153, P2154, P2156, P2157, P2184, P2185, P2186, P2227, P2228, P2229, P2230, P2237, P2237, P223C, P223C, P223E,

P223E, P2243, P2243, P2, P2251, P227C, P227D, P227E, P228C, P228D, P2300, P2301, P2303, P2304, P2306, P2307, P2309, P2310, P2626, P263A, P263B, P26B7, P2718, P2720, P2721, P2727, P2729, P2730, P281D, P281E, P2736, P2738, P2739, P2812, P2814, P2815, P2824, P2826, P2827, P2AB8, P2AB9, P2AFE, P2AFF, P2B2D, P2B2E, P2B33, P2B34, P2B35, P2B39, P2B39, P2B3B, P2B81, P2B93, P2BB4, P2BB5, P2BB8, P2BB9, P2BBA, P2C05, P2C06, P2C07, P2C08, P2C09, P2C0A, P2C0B, P2C0F, P2C10, P2C12, P2C13, P2C14, P2C15, P2C16, P2C17, P2C18, P2C19, P2C9B, P30CE, P3080, P3081, P3082, P3085, P3086, P3087, P308A, P308F, P3091, P3094, P3095, P3096, P3099, P309B, P30B0, P30B1, P30B2, P30B3, P30BE, P30BF, P30C2, P30C3, P30C6, P30C7, P30CA, P30CB, PIT5677, PP308C, U0073, U0617, U060F, U0644, U111A, U1346, F47UA, P0404, P0476, P048A, P28F7, P140B, U0606, U0607, P305B, P1007, B2B0E, P2535, P0480.

Version	9
Modified	<p>Released September 17, 2021</p> <p>Revised October 22, 2021 – Added Information from Field Action Investigation to Condition/Cause/Correction # 2 and Repair Information from PIT5742 to Condition/Cause/Correction # 4.</p> <p>Revised November 08, 2021 – Added Exhaust Pressure Differential Sensor Connector Repair to Cause # 3, LM2 Only Section.</p> <p>Revised January 05, 2022 – Added a Graphic to the Cause #3 Section, Added 2 Graphics to the Cause #4 Section, and Updated the Warranty Information.</p> <p>Revised February 01, 2022 – Added 2022 Model Year, Added 5 DTC's to Condition #3.</p> <p>Revised May 09, 2022 – Removed 2022 Silverado and Sierra 1500 - (RPO J22) Models.</p> <p>Revised October 10, 2022 – Added Important to Start of Document, Corrected Graphic and Text in Cause # 2, Corrected First Graphic in Cause # 3, Realigned Text and Moved Graphics from Correction # 3 to Cause #3, Removed Graphics from Correction # 3 and Added Leading Sentence.</p> <p>Revised December 07, 2022 – Added 2023 Model Year, and L87 and L84 Engine RPO's to the T1 SUV's.</p> <p>Revised March 03, 2023 – Added RPOs MQE, MYC, MQB to Transmission section and Added P0480 to Condition 4 section.</p>

