

## Sensor GP-Temp-Gp, temp sensor open circuit (2566453, 2566454) (Eng)

(Status Updated: 31Aug2017)

**CPI Number:** 340804

**Status:** Open , Active

**6 Sigma Phase:** Control

**Commercial Impact:**

**Initial Project Activation Date:** 03Dec2015

**Target Completion Date:** 27Oct2017

### Models: [\(More...\)](#)

(120K), (120K 2), (120K 2 OEM), (120M 2), (120M 2 OEM), (12K), (12M), (12M 2),  
 (12M 3), (140K), (140K 2), (140M), (140M 2), (140M 3), (14L), (14M),  
 (14M 3), (1506), (1506D), (160K), (160M), (160M 2), (160M 3), (16M),  
 (16M 3), (1706), (18M 3), (205), (205B), (206), (206B), (211),  
 (211B), (212), (212B), (213), (213 LC), (213B), (214), (214B),

### Symptom/Description:

Product Link Diagnostic Error Codes - High Temp Events, Voltage Above Normal, and Voltage Below Normal Failures can cause customer downtime & warranty pain due to temperature sensor failures for T3, T4F and T4I machines.

### Part Number:

234-5012 (SENSOR GP-TEMP) 234-5013 (SENSOR GP-TEMP) 256-6453 (SENSOR-TEMP)  
 256-6454 (SENSOR-TEMP)

### Dealer Status:

Solutions have been properly lab validated and will be implemented into production by 3rd Qtr 2017.

### Interim Action Info:

**Repair Type:** Field

**Repair Action:** Caterpillar is aware of this problem, but an Interim Repair has not been defined for all root causes. Please replace with same part with date code 02 Aug 2014 and later.

**Repair Eff S/N:** A8P[00201-00363],BDN[00146-01991],BJ6[00201-01114],BRB[00202-00339],BW2[00150-00150],C9N[00502-01544],D9N[00100-05388],DBW[00105-00348],DTD[00175-01307],DYB[00130-00277],DYC[00236-00427],DZW[00131-01667],ECM[00153-00269],ENC[00120-00762],EYE[00125-00514],F7B[00250-00285],FCT[00116-01552],FMC[00213-00217],FRK[00130-00538],GMK[00001-01660],GTZ[00136-09002],HJF[00100-00472],HTZ[00002-00251],HWN[00150-00791],J3R[00140-00146],JEL[00156-00359],JJW[00103-00137],JNS[00131-00134],K1Y[00220-00290],KEX[00101-00131],KKJ[00120-00259],KMM[00120-00560],KRS[00281-00420],KSB[00226-02018],KTG[00130-00134],KYY[00150-01380],LDN[00500-01587],LTE[00100-00104],LTS[00250-00357],LXK[00123-00591],MCW[00100-07759],MLN[00273-01997],N3F[00001-00995],N8T[00225-00228],N9D[00100-00223],P6C[00287-00304],PBG[00284-10001],PEM[00267-00947],PWR[00150-03754],PXR[00150-00610],RAD[00001-

00326],RCW[00200-01601],RDR[00106-00310],REP[00150-00794],REX[00304-00346],RFM[00252-00723],RHN[00155-03619],SLJ[00126-01289],SNZ[00100-00669],SWL[00001-03409],T4R[00270-32032],TFK[00151-00290],TFS[00110-01325],TJA[00425-01254],TNM[00104-00798],TNY[00001-00002],TWX[00150-00446],W7K[00299-02460],WRH[00100-06436],WTB[00101-00127],WTC[00101-00147],Z4W[00114-00729],ZJB[00002-01692],ZPS[00100-00177],KCW[00124-10053],FBW[00117-00179],AKM[00001-02529],HWC[00150-02763],JWY[00112-02909],LWY[00175-00752],GLS[03905-81001],D9T[00165-01529],BXG[00179-00552],SZL[00181-10239],8AL[00001-03582],DFJ[00429-00558],BDR[00001-02223],RAK[00150-00610],P7Z[00100-00195],N9M[00100-00534],HMH[00001-99999],XDL[00001-99999],E9Y[00204-00256],F4D[00200-00434],A9P[00100-00381],SSP[00267-01174],H9A[00101-00170],T6A[00277-01096],E9W[00225-00229],MGM[00101-00181],6S6[00100-00103],AWF[00638-78001],K6K[00544-78002],N9F[00100-00769],RWB[00100-00132],LGK[22643-81008],467[00101-00661],J5M[00177-01267],DJB[00150-00942],KLL[00110-01069],T4S[00274-00383],DWC[00277-00527],EX6[00001-99999],M9K[00203-00425],L8X[00001-99999],JFT[00105-10149],R9G[00100-00372],KRA[12353-20015],JXP[00181-00258],LJR[000297-01657],GKP[00100-00504],KY2[00160-03363],3ZC[00001-00191],MJC[01347-11874],SZZ[00100-10101],RYF[00575-78005],J8E[00001-99999],KW4[00130-01222],ZMX[00240-00660],SWE[00502-00579],HPB[00201-00403],MP7[00101-00102],WJH[08900-81004],JNJ[00593-00711],LEM[00264-20101],RJS[01607-78016],DJK[00201-00270],NDY[00201-00275],SGT[00100-00553],BWX[00528-76002],EJJ[00225-00316],M1Z[01007-01921],LNC[00001-99999],SZP[00154-10126],TWZ[00250-00635],5CC[00001-00981],F7G[00170-00238],CH9[00115-00182],2RC[00001-00838],LHC[00100-00750],FLL[00162-00489],SZS[00106-10191],PBA[00200-03213],ET6[00001-99999],FB4[00022-00475],RPR[00106-00340],JR9[00100-00460],WMD[00001-99999],SDN[00101-01810],N1B[00103-00371],WTA[00101-00120],LFB[00222-00235],3JC[00001-00539],EL7[00101-00232],TWG[00196-00782],RPM[00003-00817],LFJ[00252-00254],YJX[00100-00150],M9J[00207-00952],535[00520-00755],9XB[00001-00099],LFF[00232-00495],M1G[02245-03437],W8P[05294-05406],DZF[00123-00399],TMX[00100-01419],B9M[00001-01078],X3M[00100-00572],2T4[00121-00753],EN8[00246-00367],M5G[00656-00689],MMS[00100-00181],GMS[00001-99999],EKW[01215-01677],J8B[02626-78006],J7D[00001-99999],LAY[01663-01667],545[00846-01256],LGP[00554-00689],MB9[00100-00170],4DC[00001-00667],CY2[00150-00224],MG5[00195-01378],FM2[00276-00538],WES[00276-00419],E4S[00121-00139],WMR[00200-01214],TRB[00653-04460],J9H[00001-99999],AN3[00001-99999],AZW[00317-00429],B9G[00001-01056],MH6[00001-00293],K88[00001-99999],TTT[00120-00277],8SS[00001-00654],A6D[02805-78001],3HC[00001-00499],L8D[00123-00491],J8G[00001-99999],CS9[00101-01803],N9T[00100-00246],TW4[00001-99999],T1F[00104-00278],LAE[00410-00909],2L4[00001-99999],2JC[00001-00124],BTX[01064-78004],ALR[00001-00800],SZN[00342-10143],L4E[00376-77007],F4A[00253-00663],H2D[00001-00794],EDF[02006-76001],GJB[00001-01082],R9J[00101-01857],HE8[00001-10311],2T2[00001-99999],C9M[01650-01692],EXL[00255-00314],W63[00100-00320],L8H[00100-01261],DHA[01572-02396],7C9[00100-00106],M92[00100-00107],HAZ[00502-00898],CP5[00101-00109],N9A[00225-00228],BDM[00001-02227],MEH[00001-99999],W8K[00150-01006],C8L[01550-01700],KAS[00003-00549],EDW[00101-00904],A7G[02196-02332],FB8[00258-00512],4EC[00001-00519],SC6[00100-00137],CBF[00001-00357],B1P[06121-30660],H2A[00001-00706],JKG[00502-01312],RAM[00106-00303],9PS[00001-00527],DH4[00123-02082],KAW[00251-00318],FRS[00166-01261],DHW[00152-01570],HWP[00150-01409],GAT[00150-00383],MWH[00151-00422],NBP[00201-00912],F2T[00127-00622],B1L[02424-76001],J6C[00001-99999],D5X[00100-00213],TMG[00001-99999],P1C[00495-00653],JWJ[00150-03288],WEY[00161-00853],R9N[00102-00220],SDK[00111-00359],MH9[00101-90105],SNK[00001-00177],HJR[00150-00690],DJA[01228-01228],MD7[00001-99999],HNK[00001-99999],LFH[00242-00242],P3K[00140-00526],NGX[00101-00441],SPD[00167-00729],M5B[00100-00814],MXL[00267-01779],2T5[00131-00149],JAH[00001-00368],GJE[00100-01911],WFH[00001-00551],L4Y[00001-99999],RDF[00150-00870],BZR[00348-75001],XDJ[00001-99999],F9M[00100-00481],WTR[00101-99999],T4A[00551-00897],TAL[00424-02775],NGP[00102-01052],GB3[00102-00962],B72[00001-99999],JML[00250-00364],W3H[05298-05769],LXJ[00125-03859],P2T[00142-00349],J3H[00100-00169],JLK[00245-91259],FKR[00885-76002],LBL[00100-00590],G73[00001-99999],221[00384-68300],TJF[00107-00446],WRN[00301-00583],Z8D[00001-99999],KMR[00201-00639],1KB[00001-00093],EN3[00171-00185],N9J[00100-00624],N8F[00100-00854],R9T[00100-00349],KB4[00100-65690],FB6[00168-00329],TFJ[00141-00333],J3A[00128-00759],JJM[00001-00243],2T6[00001-99999],7P6[00001-99999],RDC[00001-99999],D3X[00148-00451],T4P[00256-00490],EXD[00128-00145],FB3[00164-00311],REH[00102-09523],MAL[00106-00599],H2G[00001-00423],ALY[00001-03251],RST[00200-02209],RBP[00001-99999],J4M[00001-00104],B94[00100-00204],KB6[00300-00466],TDY[00102-10837],J5B[00224-00629],JFL[00124-00174],ALH[00001-00897],HWE[00150-00705],HDC[00001-00313],6WL[00001-00990],3PJ[00001-01484],LNB[00123-01882],MJD[00143-01544],T8E[00001-99999],E9S[00205-00268],AC4[00100-00337],DFA[00409-75001],D6W[00298-01241],Z9K[00400-00558],SSS[00100-00647],LAJ[00231-00632],A6G[05648-76004],BDX[00001-02322],DBD[00940-00983],N9E[00100-00110],HYT[00275-00313],N9S[00102-00257],JKM[01382-03205],F2W[00169-00525],4CF[00001-00594],M32[90101-90101],W6A[05341-05427],WCG[75001-75002],PEZ[00598-00733],AK7[00100-00101],6TL[00001-01884],M9H[00201-00514],RKH[00001-99999],R1Z[00001-99999],TMY[00226-00385],R9R[00001-00105],D8W[00165-50302],GHS[00588-01846],GMY[00100-00103],P8L[00217-00729],DJY[00001-01741],KJL[01288-01294],PCW[00200-00377],K1R[00100-00114],LFK[00262-01113],TJ5[00100-00679],TWM[02345-06009],9SD[00100-00360],FM4[00111-00211],H2B[00001-00552],ES9[00001-99999],J9F[00001-99999],S4P[00100-00322],P56[00100-00392],A78[00001-99999],YAG[00001-99999],JHB[00001-00569],JDY[00502-00769],KSA[00001-99999],EY2[00101-00177],JAD[00287-02274],N9K[00100-00127],6XG[00001-00218],HKA[00401-00506],L4F[00383-00530],M9D[00207-01844],ASX[00407-78001],YZZ[00114-00526],9MB[00001-00156],CT3[00100-00232],ENE[00001-10330],M5K[00100-11692],KW2[00150-02815],EMB[00250-

39959],KEW[00001-99999],CBJ[00001-00520],DFL[00001-99999],880[00182-00640],LBD[00180-00210],GAC[00127-03146],MDB[00260-00297],N9L[00100-00167],RLB[00671-00905],JRP[02637-03340],MBP[00001-99999],MTP[00100-00434],EN2[00196-00210],CH5[00209-00472],GTA[00226-00786],GMD[00182-00212],EN9[00215-00216],STE[00100-00130],LCP[00172-76001],TSM[00100-00418],AWN[00198-00200],JPA[00712-04476],R9L[00100-00258],WTP[00101-00114],KEK[00150-00462],Z8Z[00001-99999],RAY[00001-99999],R9M[00100-00559],DBF[00104-00175],W2S[05077-05090],CCG[00001-00465],SZW[00140-10102],1EJ[00001-00532],LYB[00150-00562],RAB[00202-00385],SGA[00100-00106],D9G[01158-01735],3L5[00100-00143],SKL[00757-00762],W5M[05272-05653],KL2[00122-02874],N4A[02165-76001],N5F[00100-01155],KCE[00234-00428],KWW[00140-01303],FB5[00137-00207],MLW[00320-01126],ZEB[00211-00219],F8B[00287-01069],JLS[01450-01642],N9N[00101-00155],XBK[00146-00151],RRK[00200-00307],CYY[00849-01784],X4T[00291-00482],JAS[01537-01586],BDK[00001-02096],KTW[00001-99999],P5F[00100-00536],TFH[00131-00160],BXD[01033-75018],A6J[01875-78002],5ZF[00001-00095],MXK[00100-00279],LFE[00554-04041],KWJ[00174-04614],HWG[00150-00509],ERM[00166-00296],M9E[00206-00409],M5S[00102-00354],MJR[00150-00355],AMA[00141-00718],KGG[02013-02109],JDK[00413-00570],PLR[00100-00721],HZZ[00001-99999],ML7[00155-01005],T4Z[00200-00483],R4A[00255-02859],ZJT[00107-01812],JRE[13507-82001],BCZ[00001-02246],XCJ[00102-10213],SGG[00101-00212],C64[00100-00191],LBN[00171-10027],JRW[00150-78001],R9W[00104-00199],WTE[00101-00125],CA6[00263-00334],KGP[00100-00275],NGH[00001-00118],JSC[19312-81005],HFW[00140-00932],CH3[00156-00499],JEP[00874-02440],JKR[01225-01633],RJM[00120-00568],D9X[00250-00578],JPR[00236-00960],PAZ[00188-00247],ML5[00151-01508],K9X[00001-99999],TAN[00403-01393],KPZ[03922-78001],ZAE[00001-99999],EN6[00001-99999],4L5[00100-00187],WAW[00232-00254],H2E[00001-00447],BXY[04358-78007],2T3[00111-00386],CA4[00100-00390],MH7[00326-00422],KMT[00001-99999],JWS[00164-00401],SMC[00403-01860],F2Z[00144-00220],K3D[00113-01208],MEL[00100-00243],SZM[00160-10119],PZL[00136-00996],DFX[00001-99999],BBD[30003-75001],LZA[00123-00502],WTL[00101-00102],Z4Z[00269-00706],GB7[00101-00301],DJG[00001-00535],WXZ[00201-00325],C5L[04354-06292],109[00100-00110],N9G[00100-00264],C7K[011302-01503],BYN[00601-01249],KAX[00250-00295],F6S[00298-00433],5TC[00001-00063],2D2[00100-00100],XXT[00135-00962],NAP[00100-01681],LWX[00125-00761],F6N[00109-00303],K5K[03389-82298],7ML[00001-02992],HRA[00100-03024],KDE[00150-01832],LKJ[00508-78001],PF8[00201-00712],F9B[00100-00220],WLM[00125-00307],MB5[00225-00257],MG2[00100-00155],LCS[01582-02523],F7C[00210-00359],NPE[00201-00280],N1A[04526-05162],B9D[03139-76001],N1D[00364-00940],FB2[00281-00389],NHL[00001-99999],GB6[00100-00561],FBH[01860-02810],HWD[00150-02155],FTR[00175-01221],B66[00001-00270],CBL[00001-00467],P3W[00188-00275],K5E[00137-00787],H24[00001-00479],R9S[00100-00360],JNM[00300-00365],NH3[00123-01212],W67[00100-00154],2L3[00001-99999],2L7[00151-00339],A7D[01112-01138],WGN[00001-99999],B9F[01015-01497],P9M[00265-00309],KAY[02017-78001],DLS[01289-76003],JTR[00100-00935],2L5[00100-00173],LXD[00100-00308],T4Y[00100-00502],N9R[00100-00324],PEC[00125-00134],DKD[00180-00877],2L6[00141-00146],R9P[00100-00199],NSL[00100-00218],N9B[00100-00518],KE5[00001-99999],H2F[00001-00254],KM2[00001-02392],GDS[00100-01066],YCW[00187-00788],F9A[00150-00418],W73[00100-00248],HWB[00150-01296],H2C[00001-00673],W8R[05080-05107],K5L[00001-99999],FER[00001-03756],EJB[00167-00967],F1B[00200-00216],MJS[00275-00605],NST[00102-00165],B93[00101-00212],FAC[00918-99709],B1M[02971-04532],LBP[01295-02244],9BF[00001-01261],5DC[00001-00514],PER[00200-01143],DH6[00100-00152],W2T[05059-05083],TFF[00121-01413],R9H[00138-00993],SXJ[00150-00159],BEB[00001-02067],NAW[00100-91001],LXX[00001-10317],BZZ[00662-75001],LNA[00123-06679],LZF[00178-10052],JZC[00175-00309],B9E[00523-01211],B9K[00407-75002],CCS[00001-00433],PTE[00183-00211],BDY[00001-02082],F5B[00001-99999],RLW[00236-00255],B92[00100-00692],MLH[00150-01789],SCG[00105-00169],CPX[00100-00200],RGS[00150-00762],JLX[00100-01003],S6T[00111-01000],A7A[00188-00333],M9P[00001-99999],WTS[00100-00122],D5M[00001-99999],JCB[00250-00324],ECN[00117-01713],7WF[00001-00208],EL6[00001-99999],NKL[00154-00599],RRA[00100-81001],ETE[00001-99999],LBX[00001-99999],PRM[00074-00441],CR3[00100-00129],CG8[00100-00109],TFB[00111-00836],P6K[00289-00599],JAP[00947-06973],232[00256-06303],A8J[04178-04264],WW3[00001-99999],KJP[00401-02650],GCT[00716-02664],JJA[00272-03535],C5H[01812-03151],9MF[00001-00605],SSA[00200-00486],MHG[06270-78002],KZL[00203-78001],L8B[00123-00503],JWD[00273-00339],BG8[00100-00871],LKM[01366-31958],L4D[00364-00462],T6X[00001-99999],4JN[76001-76001],SGZ[00100-00216],M9C[00200-00813],GBM[00373-01449],6ES[00001-00302],N9Y[00104-00234],KSF[00150-02254],XAL[00001-99999],JEN[00240-00403],DFR[00200-00521],2B3[00100-00125],KMA[00001-00109],CCK[00001-01035],3GC[00001-00486],JMS[06141-78004],2L8[00161-00162],D2W[00238-00500],DBK[00102-00131],JBP[00118-03174],KF2[00110-02309],W8S[00100-00264],SKR[00150-45157],525[01217-02044]

**Pub Type:** TIB

**Pub Number:** M0082719

**Pub Date:** 13Apr2017

## Root Cause:

- 1: The NTC epoxy coating was being cracked by NTC jig (Tooling) during assembly.
- 2: Moisture ingress thru housing interface seal

3: Moisture ingress via O-ring

4: 1) Damaged or broken connector that led to no continuity. 2) Excessive heat that caused the thermistor to fail along with a nicked O-ring.

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**Caterpillar Confidential:** Yellow

CPI IT Help Desk

Data Privacy

**Last Updated:** Thu Sep 7 16:02:49 CDT 2017

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