Document ID# 1878635
2004 Cadillac CTS

Subject: GM Technical Assistance Information Form #01-00-89-011D - (12/14/2006)

Models: **2007 and Prior Passenger Cars and Trucks (Including Saturn)**

2007 and Prior HUMMER H2, H3

2007 and Prior Saab Vehicles

Attention: **"GM of Canada" and "IPC" dealers are not authorized to utilize this service bulletin.**

This bulletin is being revised to add the Customer Concern Verification Sheet. Please discard Corporate Bulletin Numbers 01-00-89-011C (Section 00 - General Information).
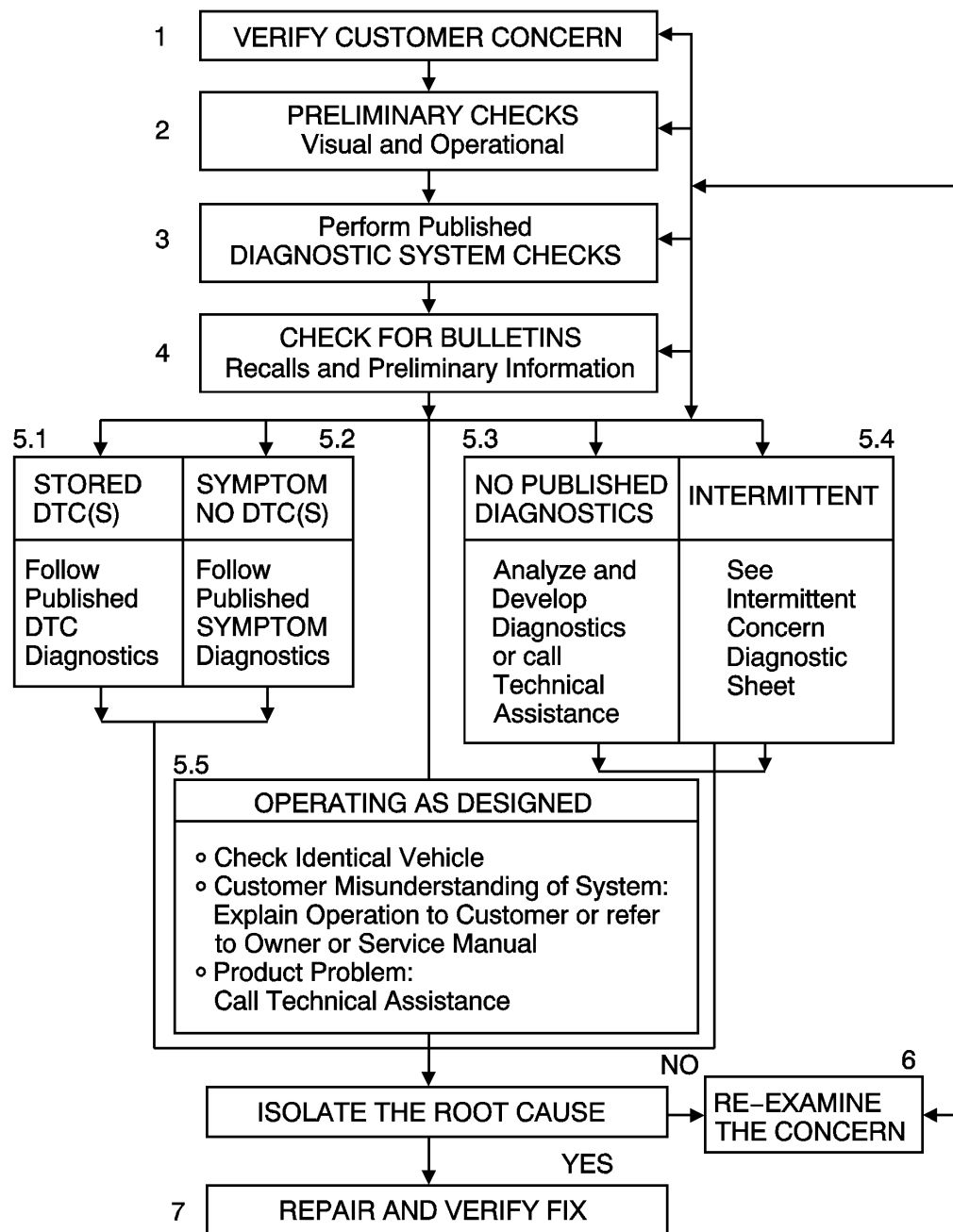
Important: As of September 13, 2004, Technical Assistance will require the appropriate SI or WIS document number for the technical issue you are working to resolve. This document will be the starting point of your conversation with a TAC consultant.

The GM Technical Assistance Center (GMTAC) form combines three information functions into one document. It is expected that the caller has performed Strategy Based Diagnostics (SBD - see below) and has completed the GM TAC Form (found at the end of this bulletin) prior to calling TAC.

- The upper portion of this form is used to prepare your information about the vehicle prior to contacting Technical Assistance. Preparing for your call in advance will allow Technical Assistance personnel to reduce your call time and provide quality recommendations. In preparing this information, please refer to the Strategy Based Diagnosis section below. These diagnostic steps should be taken BEFORE you contact Technical Assistance and will assist you in completing the form.

- The Electronic Case Closing (ECC) section should be accessed via DealerWorld to close a Technical Assistance case. The TAC Case Closing information is important because repair information that is loaded into our database can be used to repair other vehicles with the same concern.

- The Quality Survey section should be accessed via DealerWorld. Completion of this survey provides TAC with your case feedback to improve the service we provide to dealerships.

- The TAC Case Log Sheet should be kept by a phone designated for calling TAC. When calling TAC, you should log in the date of the call, your name, the TAC consultant's name, the repair order number, TAC case number and the date the case was closed. The TAC Case Log will allow you to maintain an accurate list of your open and closed TAC cases.

Strategy Based Diagnosis

The goal of Strategy Based Diagnostics is to provide guidance when you create a plan of action for each specific diagnostic situation. Following a similar plan for each diagnostic situation, you will achieve maximum efficiency when you diagnose and repair vehicles. Although each of the Strategy Based Diagnostics boxes is numbered, you are not required to complete every box in order to successfully diagnose a customer concern. The first step of your diagnostic process should always be, verify the Customer Concern box . The final step of your diagnostic process should be Repair and verify the Fix box 7. Refer to the following chart for the correct Strategy Based Diagnostics.

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1   ┌──────────────────────────────┐
    │   VERIFY CUSTOMER CONCERN    │◄───┐
    └──────────────┬───────────────┘    │
                   ▼                     │
2   ┌──────────────────────────────┐    │
    │     PRELIMINARY CHECKS       │◄───┤
    │     Visual and Operational   │    │
    └──────────────┬───────────────┘    │
                   ▼                     │
3   ┌──────────────────────────────┐    │
    │       Perform Published      │◄───┤
    │   DIAGNOSTIC SYSTEM CHECKS   │    │
    └──────────────┬───────────────┘    │
                   ▼                     │
4   ┌──────────────────────────────┐    │
    │      CHECK FOR BULLETINS     │◄───┤
    │  Recalls and Preliminary Information │
    └──────────────┬───────────────┘
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5.1 STORED DTC(S)	5.2 SYMPTOM NO DTC(S)	5.3 NO PUBLISHED DIAGNOSTICS	5.4 INTERMITTENT
Follow Published DTC Diagnostics	Follow Published SYMPTOM Diagnostics	Analyze and Develop Diagnostics or call Technical Assistance	See Intermittent Concern Diagnostic Sheet

5.5 OPERATING AS DESIGNED

- Check Identical Vehicle
- Customer Misunderstanding of System: Explain Operation to Customer or refer to Owner or Service Manual
- Product Problem: Call Technical Assistance

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┌──────────────────────────┐   NO    ┌──────────────┐ 6
│  ISOLATE THE ROOT CAUSE  │────────►│  RE–EXAMINE  │
└────────────┬─────────────┘         │  THE CONCERN │
             │  YES                  └──────────────┘
             ▼
7   ┌──────────────────────────┐
    │   REPAIR AND VERIFY FIX  │
    └──────────────────────────┘
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- (1) Verify the Customer Concern Using the Customer Concern Verification Sheet: The first part of this step is to obtain as much information as possible from the customer. Are there aftermarket accessories on the vehicle? When does the condition occur? Where does the condition occur? How long does the condition last? How often does the condition occur? In order to verify the concern, the technician should be familiar with the normal operation of the system and refer to the Owner or Service Manual for any information needed.

- (2) Preliminary Checks: Conduct a thorough visual inspection. Review the service history. Detect unusual sounds or odors. Gather diagnostic trouble code (DTC) information in order to achieve an effective repair.

- (3) Perform Published Diagnostic System Check: The Diagnostic System Check verifies the proper operation of the system. This will lead the technician in an organized approach to diagnostics.
- (4) Check Bulletins, Recalls and Preliminary Information (PI)
  s.
- (5.1) Stored DTCs: Follow the designated DTC in order to make an effective
  repair.
- (5.2) Symptom No DTC: Select the appropriate symptom. Follow the diagnostic steps or suggestions in order to complete the repair.
- (5.3) No Published Diagnostics: Analyze the Concern. Develop a plan for the diagnostics. The Service Manual schematics will help you to see system power, ground, input and output circuits. You can also identify splices and other areas where multiple circuits are tied together. Look at component locations to see if components, connectors or harnesses may be exposed to extreme temperature, moisture, road salt or other corrosives battery acid, oil or other fluids. Utilize the wiring diagrams, system description and operation, and system circuit description.
- (5.4) Intermittents: An intermittent condition is one that does not occur continuously and will occur when certain conditions are met. Generally, intermittents are caused by faulty electrical connections and wiring, malfunctioning components, electromagnetic/radio frequency interference, and aftermarket equipment. Combine technician knowledge with efficient use of the available service information. Evaluate the symptoms and conditions described by the customer. Refer to Intermittent Concern Diagnostic Sheet.

  Use of a check sheet or other method in order to identify the component. Follow the intermittent concerns diagnosis found in Service Information. A scan tool and a digital multi-meter may have data capturing capabilities that can assist in detection of intermittents.
- (5.5) Vehicle Operates as Designed: This condition exists when the vehicle is found to operate normally. The condition described by the customer may be normal. Compare with another like vehicle that is operating normally under the same conditions described by the customer. Explain your findings and the operation of that system to the customer.
- (6) Re-examine the Concern: If a technician cannot successfully find or isolate the concern, a re-evaluation is necessary. Re-verify the concern. The concern could be an intermittent or normal condition.
- (7) Repair and Verify Fix: After isolating the cause, make the repairs and validate for the correct operation. Verify that the symptom has been corrected, which may involve road testing the vehicle.

If you are not able to repair and verify the fix, complete the contact form and contact Technical Assistance.

Technical Assistance Information Form

Questions to Answer Prior to Contacting Technical Assistance

Caller Name:

Dealer Code:

VIN:

R.O. Number:

Mileage:

_____ What is the number of times this vehicle has been to your dealership for the same condition?

_____ How many days has this vehicle been in your dealership for this condition?

Does this vehicle have any GM or non-GM aftermarket accessories, or has it been modified from production? Yes/No _____

If yes, please list:

What is the customer's concern (why did the customer bring their vehicle to your dealership)?

SI Document Number (SI Document #, Service Manual page, Owner Manual page, Bulletin Number, wiring schematic, IRIS, WIS):

What are the results of your Strategy Based Diagnostics (i.e. concern duplicated? when does the condition occur? diagnostics performed? DTCs? compared to like vehicle? parts replaced?):

Tech 2 software version (if applicable):

TAC Case No. (fill in after call):

TAC Consultant's Name:

TAC Suggested Action:

TAC Case Closing Information: Please utilize the Electronic TAC Case Closing Form located on the DealerWorld Service tab. Please provide detail in the case closing. In the technician's own words, what fixed the vehicle? Be specific - include circuit and terminal numbers, locations, part name and numbers):

Refer to the example below.

TAC Dealer Survey - Technician Only

We would like your feedback on the assistance you received. To assure quality improvements, it is important that only the related technician for this repair complete this survey. Please utilize the Electronic TAC Quality Survey located on the DealerWorld Service tab.

Refer to the example below.

Example of TAC Case Closing (1 of 2)