Guided Diagnostics Factsheet



The best way to understand Guided Diagnostics (GD) is to see it in action. We've created a sample session based on common short-to-ground electrical issues—a simple problem which can nonetheless trigger a confusing cluster of symptoms and diagnostic trouble codes (DTCs).

This sample session shows how GD's prescriptive instructions guide the technician to an accurate repair with maximum speed and efficiency.

Sample Session Breakdown

| Issue Definition:

The technician enters all observable symptoms and diagnostic trouble codes (DTCs) into the GD session. In our sample session, the symptoms and error codes include P211 Electronic Throttle Control System – Unable to Close – Bankl, P0642 Sensor Reference Voltage 1 Circuit Low, P2122 Accelerator Pedal Position Sensor 1 Circuit Low, and P0652 Sensor Reference Voltage 2 Circuit Low.

2 AI Data Analysis:

GD analyzes all available data points. Its non-linear intelligence calculates symptom weights as identified by technical authors along with session findings and results from all previous Guided Diagnostic sessions. The system builds a semantic network based on symptom/error code commonalities and outlines a diagnostic workflow for the technician to follow.

3 Questions and Tests:

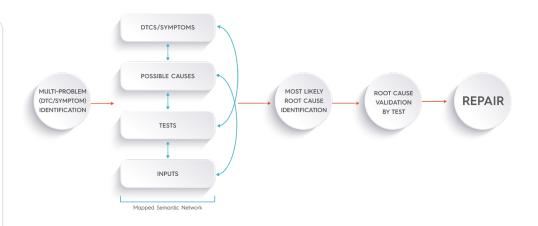
GD leads the technician through a series of YES/NO questions and PASS/FAIL tests—in this case, "Is the voltage between 4.9 and 5.1 volts?" and "Is there continuity between the ground and the secondary 5-volt supply circuits?" As the technician responds, GD dynamically re-sorts the priority of these questions and tests.

4 Root Cause Resolutions:

GD's logic engine leads the technician to a specific point of repair—in this case, the wiring harness for the Accelerator Pedal Position Sensor 5-Volt Supply circuit. The technician executes this repair and finds the entire DTC/symptom cluster resolved.

5 Summary and Session Data Processing: Once a repair is successfully completed, GD provides a full summary report of all tests, findings, and the eventual root

cause solution. This data is then ingested by GD's reasoning engine, where it provides additional intelligence for future diagnostic sessions.



What Makes GD Different from Other Diagnostic Solutions?

Other diagnostic platforms apply a linear, one-dimensional logic. This means, there's no assistance from the diagnostics to understand all the interconnectivity between components in a multi-problem scenario – which is what happens most of the time.

Unlike competing solutions, GD arranges problems, tests and causes into separate classes and handles each differently. It also assigns different levels of "weight" to each element within these separate classes.

These distinctions open the door to a non-linear mode of intelligent reasoning.

GD's non-linear compound logic identifies the best tests to find and validate the original root cause. It matches symptoms with trouble codes and factors in past session data to create diagnostic priorities—priorities which shift dynamically as the technician inputs findings, quickly leading a technician to the correct, root-cause solution.

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