# Case Based Diagnostics

getting started · https://www.diagnostic-assistance.com/docs/case-based-diagnostics/

### Why do we use cases within diagnostic assistance?

The philosophy of diagnostic assistance software is that it uses cases as the central pillar around which the diagnostic reasoning and progress is organised.

This is because a case is a convenient form to store and record information relating to a vehicle problem. But, much more than this, cases keep the often frantic or cicular process of vehicle diagnostics well organised and without bias. This is but one element of the Diagnostic Assistance softwares 'secret sauce'.

Cases may also be shared with others.

### Cases contain facts; facts fix faults faster.

Cases are how the top technicians solve the most complex of faults. Until now, this method was kept largely secret.

When observing a top technician in action, they make notes, they planning and they organise. They run a both a case process and a diagnostic thought process. This twin track approach requires skill, training, practice and discipline. It delivers huge benefits in terms of right-first-time diagnosis, but it's difficult to do, which is why so many other technicians find diagnostics a real struggle.

The chief designer and brains behind Diagnostic Assistance is the highly regarded Diagnostic Specialist, Master Technician, Seminar Host, Top Technician Judge and Training Instructor James Dillon. James has worked on diagnostic skills and process coaching over the years, having trainined and supported many Top Technician and World Skills Compeitors. He developed a deep and thorough understanding of vehicle diagnostics during his 30 years fixing the unfixable problems for other garages and technicians.



Because most 'normal' vehicle technicians struggle at executing this separation of process/organising and fault finding direction, Diagnostic Assistance was born.

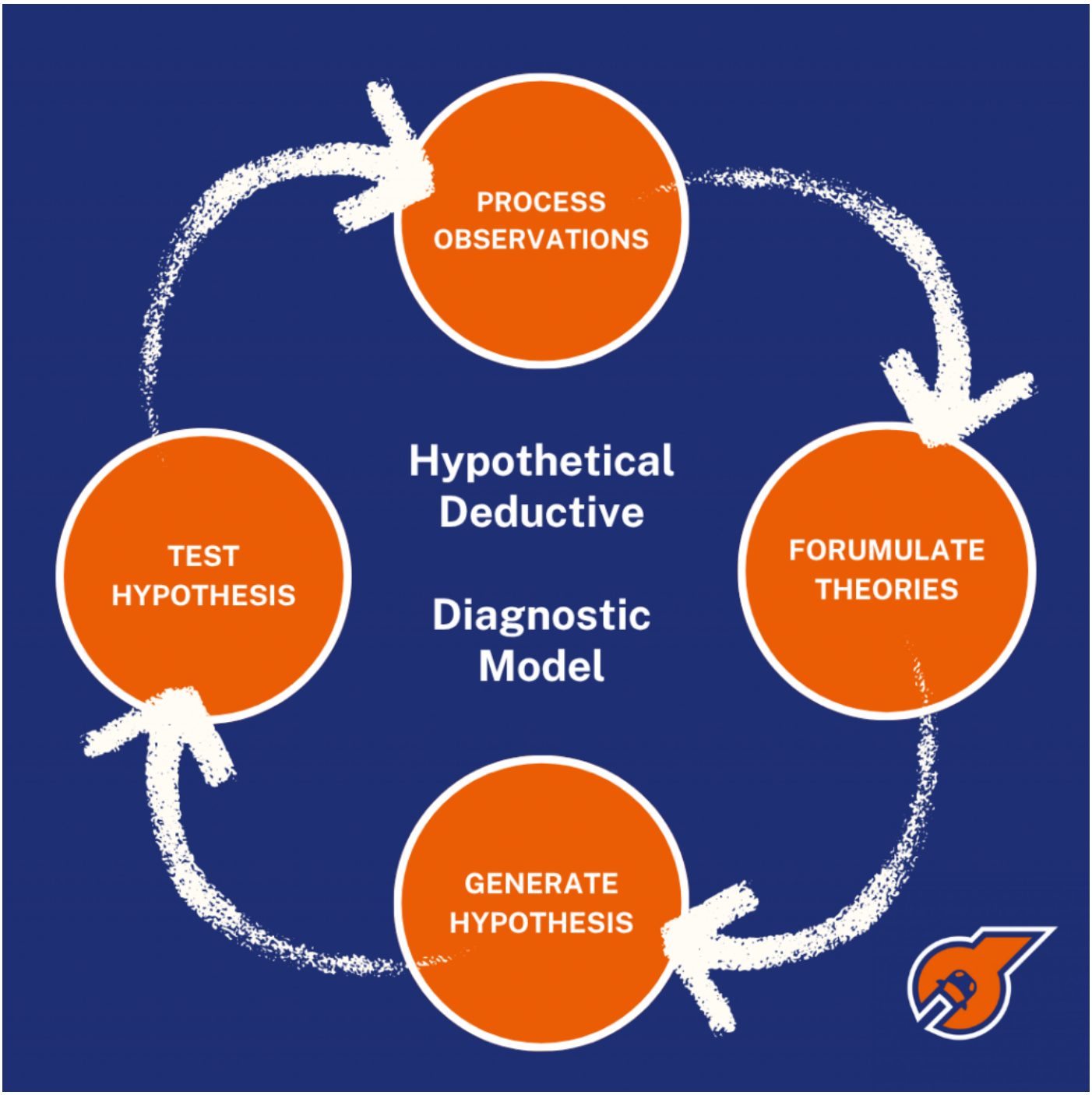
In addition to the organisation and structure, to the de-biasing, the system also has in-built in help, guidance, support and just-in-time learning.




Having analysed what all of the top technicians are doing during diagnostics, whilst under pressure, James has refined and distilled this into the software application you see today.

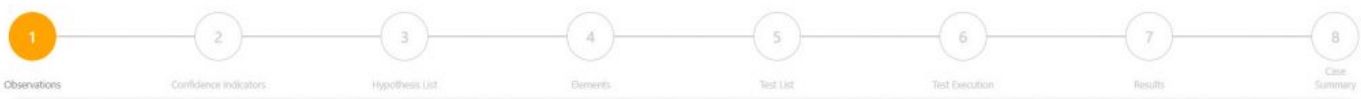
### Step-By-Step. Logical and Methodical.

The step-by-step process that Diagnostic Assistance guides technicians through is proven in the field. It is more flexible than static flow charts and works long after the last silver bullet is fired.




The Diagnostic Assistance process is based on the trademarked 4rights diagnostic process. The structure and format guide technicians from start to finish in their diagnostics.

Diagnostic Assistance case structure has eight steps:




**Step 1: Observations** - what reported/observed as being wrong with the vehicle.

**Step 2 Confidence Indicators** - when the tech has been with the vehicle, which direction do the symptoms indicate.

**Step 3 Hypothesis lists** - do a 'brain dump', of what could be causing the problem, in order 'most likely' to 'least likely'. This step helps de-bias the diagnosis.

**Step 4 Elements** - every hypothesis is confirmed by the failure of an element. This is where the diagnosis get's real.

**Step 5 Tests** - each and every element is testable, selecting the tests to do is up next.

**Step 6 Test Execution** - 4rights to the fore. Measuring the right thing, in the right way, at the right time, with the right tool - that's really got to matter. So just-in-time-learning and guidance abounds in this step.

**Step 7 Test Results** - recording and classifying the gathered results refutes (means is isn't true) or confirms (means it is true) the hypothesis. Solid logic like this progresses the diagnosis to a conclusion.

**Step 8 Case Summary** - contains all that you've done on the way to smashing out a right-first-time diagnosis. Evidence based diagnostics at its finest.

### whats next for the case after we've I.D. the vehicle?

The vehicle, once identified through vehicle make and model, is set up with the vehicle registration mark and vehicle identification number as identifiers for the diagnostic case. Cases also have their own unique system ID.

Once we have a vehicle selected, it is then time to declare what is wrong with the vehicle. This is step 1.