Case Step 4 – The Elements

getting started · https://www.diagnostic-assistance.com/docs/case-step-4-the-elements/

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FIND IT
Cases → open your case → **Step 4, Elements**

TL;DR
These are the components to investigate, listed in recommended order. Start from the top.

What this step is for

Step 3 gave you a hypothesis: a specific, testable statement about what has failed. Step 4 turns that hypothesis into a shortlist of physical components you can actually put an instrument on.

An **element** is a component in the system, for example a fuel rail pressure sensor, a fuel filter, or a high pressure pump. DAVO lists the elements that are relevant to your chosen hypothesis, on your specific vehicle, in the order it recommends you work through them.

Why the order matters

The recommended order is not arbitrary. It balances three things: how strongly the element is implicated by the hypothesis, how cheap and quick it is to check, and how much a result would narrow the diagnosis.

For example, for "low fuel rail pressure due to high pressure pump malfunction," the system might suggest:

Order	Element	Why here
1	Fuel rail pressure sensor	Confirms the symptom is real before you chase a cause
2	Fuel filter	Easy and cheap to check, and rules out a common cause

3	High pressure pump	The accused component, and the most expensive to reach

Working top down means you spend the least time and money reaching a confident answer. It also means that if you stop early, you stop having already eliminated the cheap possibilities.

QUICK TIP

The order is a recommendation, not a rule. If you already know the fuel filter is new, skip it and move to the next element. DAVO is advising you, not instructing you.

Eliminating is progress

It is worth being clear about this, because it runs against the instinct to go straight for the suspect part. An element that tests good has not wasted your time. It has removed a branch of the investigation, and it has done so with evidence you can show the customer and record in the case.

A diagnosis you can defend is built as much from what you ruled out as from what you found.

➡ DO THIS

1. Review the element list and note the recommended order.
2. Decide whether anything in the list can be skipped on what you already know about this vehicle.
3. Select the element you want to investigate first.
4. Continue to Step 5 to see the tests available for it.

STUCK?

The list looks wrong for this vehicle. Check the system standard shown at Step 1. If the wrong standard was chosen, the elements will belong to a different specification. Use *Change Standard* at Step 1 to correct it.
The element you suspect is not listed. That usually means it is not implicated by the hypothesis you chose at Step 3, rather than that it is missing. Use the *Return to* control to go back to Hypothesis selection and pick a different line of investigation.

Next

→ **Case Step 5, The Test List:** choosing which test to run on the element you selected.