

Inside ISTA, you can perform two different types of evaluations on the Pressure Converter:

Component Activation (Click Test) and a **Guided Component Test**.

1. The Component Activation (The "Click Test")

This is the quickest way to see if the solenoid is completely dead or mechanically jammed. It forces the engine computer (DME) to send power directly to the valve while the engine is off.

How to find it in ISTA:

1. Connect to the car and pull the vehicle read-out.
2. Go to **Vehicle Management** → **Component Triggering** (or **Component Activation** depending on your ISTA version version).
3. Navigate through the tree: **Drive** → **Engine Electronics** → **Actuators**.
4. Look for **Pressure Converter, Exhaust Turbocharger** (or *Charging Pressure Control Valve*).
5. Select it and click **Trigger Component** (you can usually choose to cycle it active for 10–30 seconds).

What to look/listen for:

- **The Sound:** Walk over to the engine bay while it is triggering. You should hear a distinct, rapid, metallic *click-click-click* or a steady buzz coming directly from the solenoid.
- **The Hand Test:** If you put your finger on the solenoid body while triggering it, you should physically feel it vibrating sharply.
- **The Verdict:** If it makes absolutely no sound and doesn't vibrate, it is either completely burnt out internally or there is a broken wire in the harness connector.

2. The Guided ABL Functional Test (The Best Method)

ISTA has built-in diagnostic programs called **ABLs (Procedure/Functional Tests)**. These don't just click the valve; they actually walk you through a live pressure test using your handheld vacuum pump alongside the software.

How to find it:

1. Go to the **Operations** tab and select **Service Function**.
2. Navigate to **Drive** → **Engine Electronics** → **Charging Pressure Control**.
3. Select the test plan for the **Pressure Converter / Wastegate Actuator** and display the hit list.
4. Start the ABL.

How the test works with your vacuum pump:

The ISTA screen will instruct you to hook up your handheld vacuum pump to the system.

1. It will tell you to apply a specific vacuum to the **VAC** side of the solenoid.
2. ISTA will then electronically trigger the valve to various percentages (e.g., 10%, 50%, 90% duty cycle).
3. The software will ask you to read your handheld gauge to see if the solenoid is successfully dropping or holding the vacuum exactly when the computer commands it to.

The Verdict:

If the solenoid stalls, reacts sluggishly, or fails to vent the vacuum down to the exact levels ISTA asks for during the duty-cycle sweeps, the internal mechanical valve is worn out. This confirmed delay/sluggishness is precisely what causes your under-load boost flutter.

Have you loaded up ISTA yet to see if there are any hidden "Shadow Codes" (like a 2885 boost deviation code) stored in the DME memory?