Invalid Parameter Values

If there are any invalid parameter values, they will be displayed in Tech Tool and the Invalid Parameters button will be enabled in the Parameter Programming operation.

This button opens the Invalid Parameters window:

There are two types of invalid parameters:

- **Inconsistent**
  - A parameter can be present in more than one control unit at a time. In these cases, the parameter value should be the same on all the control units present. If the parameter value does not match, it is considered an inconsistent value.

- **Out of range**
  - Each parameter has its own definition of valid range. This can be fixed values or values based on other parameters. If the current value is not within the valid range, it is considered an out-of-range value.

Fixing Invalid Parameters

Issues with invalid parameters in the Parameter Programming operation can occur for several different reasons, for example:

- A campaign programming or any other type of software programming that partially failed or happened to have a bad configuration.
- A missing or defective control unit that has been replaced with an empty one.

Issues cannot be caused directly by the user when updating parameters in the Parameter Programming operation. In order to fix the invalid parameters, simply enter a valid value for either the inconsistent or the out-of-range parameters. Changes will take effect after programming the values.

Parameter Restrictions

Updating some or all parameters will not be allowed in certain situations:

**Chassis ID Discrepancy**

All control units must have the same Chassis ID. In cases where the Chassis ID of one control unit does not match the others, there will be a Chassis ID divergence. If there is any Chassis ID divergence, changes will not be permitted on any parameter.
Verify the Chassis ID divergence information in the Product Status section on Tech Tool's initial page.

**Control Unit Software Mismatch**

Software mismatch happens when the software part number readout from the product does not match the software part number stored in Central Systems.

If there is any control unit software mismatch, changes will not be permitted on any parameter.

Verify the control unit status by accessing the Control Unit Information in the Product Status section on Tech Tool's initial page.

Run Program control unit operation to update the control unit with the latest software.

**Control Unit Data Mismatch**

Control unit hardware mismatch happens when the hardware part number readout from the product does not match the hardware part number stored in Central Systems. It can also happen if there is a new control unit in the product that is not yet registered in Central Systems.

If there is any control unit hardware mismatch, changes will not be permitted on the parameters from the affected control unit.

Verify the control unit status by accessing the Control Unit Information in the Product Status section on Tech Tool's Product tab.

**Control Unit Data Mismatch or Software is locked**

This restriction applies to control units that are missing in the product or control units with locked software.

A control unit is listed as missing if it is found in the Central Systems data, but not in the product. This can happen in cases where the control unit has been disconnected or developed problems and needs to be replaced.

**Note:** The parameters from a missing control unit will not be listed because a readout cannot be completed. The control unit is listed as locked for update when you or someone else has downloaded software for the connected product using the same or another Tech Tool client.

If a control unit is either missing or locked for update, no changes will be permitted on the parameters from that control unit.

Verify the control unit status by accessing the Control Unit Information in the Product Status section on Tech Tool's initial page.