

Agilent Technologies

Quick Reference Guide
for
Troubleshooting 7683 Autosampler Errors

A16009

This document is believed to be accurate and up-to-date. However, Agilent Technologies, Inc. cannot assume responsibility for the use of this material.
The information contained herein is intended for use by informed individuals who can and must determine its fitness for their purpose.

Faults

Four lights on the injector indicate its status.

During normal operation, the Ready light is on. If the injector is busy, the Run light is on.

If another combination of lights are on, an error has occurred.

Use the following instructions to try to solve the problem before obtaining Agilent service.

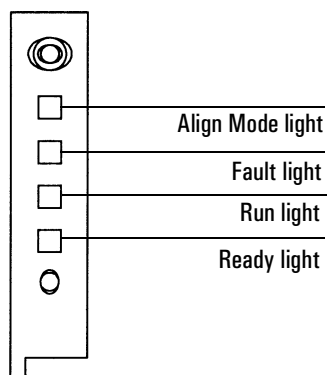


Figure 16 Injector status lights

No Light Is On

Probable causes

- The line voltage to the GC is off.
- The injector cable or connection to the GC is bad.
- Your GC requires service.

Suggested actions

1. Verify the injector is properly connected to the GC.
2. Check the power source for your GC.
3. Obtain Agilent service.

The Fault Light Is On

Probable cause

The injector door is open.

Suggested actions

1. Ensure that the injector door is closed.
2. If the fault light stays on, obtain Agilent service.

The Fault And The Run Lights Are On

Probable causes

- The injector is mounted incorrectly on the mounting post.
- Incorrect mounting post.

Suggested actions

1. Ensure that the injector is mounted properly. For more information, see page 4.
2. Ensure the correct mounting post is installed. See page 4.
3. If the fault lights stay on, obtain Agilent service.

Align Mode Light Is On

Probable causes

- The turret is not properly installed.
- The type of turret was changed while the power was on.
- The system was not initialized.
- There is an injector memory error.

Suggested action

1. Verify the turret is properly installed. See *Removing The Turret* on page 16.
2. Perform the alignment procedure to initialize the system. See *Turret Alignment* on page 17.

All Lights Are On

Probable causes

- The cables connections are loose.
- There is a board failure.
- There is a firmware revision conflict.

Suggested action

1. Check all cable connections.
2. Turn the instrument off, then on again.
3. If the lights remain on, obtain Agilent service.

Error Messages

Below is a table of sampler error messages reported on the 6850 and 6890 Plus GC's. If you receive an error message that is not shown below, record it. Then, make sure that your GC is properly configured and that your sample vials and equipment match your method and/or sequence. If the problem continues, report your error message to Agilent service.

| 6890 message | 6850 message |
|---|----------------------|
| Bottle in gripper | – |
| Front (or back) door open or injector not mounted | Inj door or mounting |
| Front (or back) injector com error | injector comm error |
| Front (or back) injector incomplete injection | Incomplete injection |
| Front (or back) injector reset | Injector reset |
| Front (or back) plunger error | Plunger error |
| Front (or back) syringe error | Syringe error |
| Front (or back) turret error | Turret error |
| Injector not present | – |
| Injector offline | – |
| No bar code reader | – |
| No bottle in gripper | – |
| Tray not present | – |
| Tray offline | – |
| – | Autoinject aborted |
| – | Invalid sequence |
| – | No injector |
| – | Prerun > 10 min |
| – | Sampler error |

Bottle In Gripper

Probable cause

The sample vial was not delivered properly and stayed in the tray gripper.

Suggested actions

1. Remove the vial and return it to its position in the tray.
2. Ensure that the tray quadrants are snapped into place.
3. Ensure that the injector is plugged into the correct connector on the back of the 6890 GC and is configured properly. See *Configuring Your Gc (6890)* on page 12.
4. Check the “deliver to” location for the vial and verify that the location is empty and free from obstructions.
5. Make sure that the injector is upright/vertical on the GC.
6. Restart the sequence.
7. If the error occurs again, obtain Agilent service.

Front (Or Back) Door Open Or Injector Not Mounted

See *Faults* on page 26.

Front (Or Back) Injector Com Error

Probable cause

There is a communications error between the injector and the GC.

Suggested action

Obtain Agilent service.

Front (Or Back) Injector Incomplete Injection

Probable causes

- The syringe needle is bent.
- The plunger or syringe carriage is operating incorrectly during injection.

Suggested actions

1. See *Correcting Syringe Problems* on page 24.
2. Remove the syringe from the injector, and check the plunger for stickiness or binding. Replace the syringe if necessary.
3. Restart the sequence.
4. If the error occurs again, obtain Agilent service.

Front (Or Back) Injector Reset

Probable cause

There is an interruption in the power supply from the GC.

Suggested action

Obtain Agilent service.

Front (Or Back) Plunger Error

Probable causes

- The syringe plunger is sticking, or not securely connected to the plunger carrier.
- The plunger solenoid is binding.
- The plunger carrier encoder is inoperable.

Suggested actions

1. Remove the syringe, and check it for plunger stickiness or binding. Replace the syringe if necessary. For more information, see *Inspecting a syringe* in the *Operation Guide*.
2. Check the viscosity of the sample against the viscosity parameter. Reset the viscosity parameter if necessary.
3. Restart the sequence.
4. If the error occurs again, obtain Agilent service.

Front (Or Back) Syringe Error

Probable causes

- The syringe carriage motor is defective.
- The syringe is not currently installed or is an incorrect type.
- The syringe carriage sensor is inoperable.

Suggested actions

1. Ensure the syringe is installed correctly. For more information, see your *Operation Guide*.
2. Ensure the syringe meets specifications.
3. If the syringe needle is bent, see *Correcting Syringe Problems* on page 24.

4. Restart the sequence.
5. If the error occurs again, obtain Agilent service.

Front (Or Back) Turret Error

Probable causes

- Something has interfered with the turret rotation.
- The turret motor/encoder assembly is inoperable.
- The turret type was changed while the power was on and the turret alignment procedure was not performed.
- Turret is loose.

Suggested actions

1. Clear any obstructions.
2. Check the Align Mode light. If it is lit, perform the alignment procedure. (See *Turret alignment* in this section.)
3. Tighten the knurled nut on the top of the turret.
4. If the error occurs again, obtain Agilent service.

Injector Not Present

Probable causes

- There is a board failure in the injector or GC.
- The injector cable is bad or not securely connected to the GC.
- There is a cable failure in the GC.
- Your method specifies an incorrect injector location (method mismatch).

Suggested actions

1. Make sure that the injector to GC cable connection is secure.

2. Check your method to make sure it uses the appropriate injector location.
3. If the error remains, obtain Agilent service.

Injector Offline

Probable causes

- There is a board failure in the injector or GC.
- The injector cable is bad or not connected.
- There is a cable failure in the GC.

Suggested actions

1. Make sure that the injector to GC cable connection is secure.
2. If the error remains, obtain Agilent service.

No Bar Code Reader

Probable causes

- Bar code reader cable not securely connected.
- Bar code reader is defective.
- Tray is defective.

Suggested actions

1. Ensure the bar code reader cable connection is secure.
2. If the problem continues, obtain Agilent service.

No Bottle In Gripper

Probable causes

- The sample vial was not found by the gripper.
- The gripper could not grasp the vial.
- The vial was dropped during transfer to or from the turret.
- The sensor in the gripper is defective.

Suggested actions

1. Make sure that the sample vials are in the locations specified by the sequence.
2. Make sure that the sample vials meet recommended specification. See your *Sampling Techniques Handbook*.
3. If you are using adhesive labels verify that the labels are properly installed. See your *Operation Guide*.
4. If the error recurs frequently, obtain Agilent service.

Tray Not Present

Probable causes

- There is a board failure in the tray or GC.
- The tray cable is bad or not connected between the GC and tray.
- There is a cable failure in the GC.

Suggested actions

1. Make sure that the tray cable connection is secure.
2. Replace the tray cable.
3. If the error remains, obtain Agilent service.

Tray Offline

Probable causes

- There is a board failure in the tray or GC.
- The tray cable is bad or not connected.
- There is a cable failure in the GC.

Suggested actions

1. Make sure that the tray to GC cable connection is secure.
2. Replace the tray cable.
3. If the error remains, obtain Agilent service.

Autoinject Aborted

The autoinject sequence on the 6850 was aborted. The other error messages shown on the GC display provide more information on what caused the sequence to abort.

Invalid Sequence

Probable causes

- The sequence is set up for the wrong injection device.
- Hardware required by the sequence is not installed and configured.
- The GC configuration was changed during sequence execution.
- The injector cable is bad or not connected properly.

Suggested actions

1. Make sure that the connection to the GC is secure.
2. Verify the sequence parameters against the GC configuration.
3. If the error remains, obtain Agilent service.

No Injector

Probable causes

- The cabling connection to the GC became loose during a run.
- An injector board or GC board failed during a run.

Suggested actions

1. Make sure that the connection to the GC is secure.
2. If the error remains, obtain Agilent service.

Prerun > 10 Min

The GC is Not Ready. Check for Not Ready and other GC messages to determine the cause.

Sampler Error

The sampler could not function for an undocumented reason. Record the code number shown in the G2629A Control Module error message. If the problem persists, obtain Agilent service and report the error number.