

BLP-1276-1.4/BLP-1275-1.4 QA BULLETIN

iPhone 4/4S Factory Restore and iTunes Error 29 Issue

Due to a recent *iOS* software update in *Apple* devices, an end-user may run into an *iTunes Error 29* when restoring their device using *iTunes*. It is not common for users to restore the device unless they are experiencing major software issues. A *Factory Restore* erases data and settings on an *iPhone*, *iPad*, or *iPod* and installs the latest *iOS* or *iPod* software. *Error 29* only affects users trying to restore their device using *iTunes*. Other features on the device and *ITunes* work normally.

An aftermarket hardware replacement causes the *iTunes* to stop the restore process once it detects a hardware change. See *Fig. 1*; an example of the error that an end-user may receive during the restore process. Please keep in mind that this error encompasses all hardware changes, and not just the aftermarket battery.



Figure 1

The error could also indicate a major hardware issue that may not be related to an aftermarket hardware replacement. This issue is not isolated to *Empire Scientific*, and is affecting the entire industry.

These issues are not isolated to batteries either. They also apply to other aftermarket replacement parts such as LCD Screens, Digitizers, Fingerprint Sensors, etc. Recently an *iOS9* update caused *Apple* devices with an *iTunes Error 53* due to an aftermarket fingerprint sensor; following an outcry from end-users. Later *Apple* decided to issue a fix on the next *iOS* update. You can find several media outlets covering this subject and it sheds a light on similar practices by *Apple*.

This problem only occurs when a user attempts to restore the device. A quick solution is to use an OEM *Apple* battery during the restore process. After the restore is complete, the aftermarket battery can be used again – That is only if the aftermarket battery is triggering the error. See Fig. 2 for more details. Note: Users will not run into this problem if they use *Factory Reset* on device to wipe their data.

CHECK FOR HARDWARE ISSUES

Errors: 1, 3, 11, 12, 13, 14, 16, 20, 21, 23, 26, 27, 28, 29, 34, 35, 36, 37, 40, 53, 56, 1002, 1004, 1011, 1012, 1014, 1667, or 1669.

Your device or computer might have a hardware issue that stops the update or restore from completing.

- Check that your security software and settings aren't blocking your device from communicating with the Apple update server.
- Then try to restore your iOS device two more times while connected with a cable, computer, and network you know are good.
- Make sure that your security software and settings are allowing communication between your device and update servers.
- If you still see the error message when you update or restore, contact Apple support.
- If you still see the error message, check for outdated or modified software.

Figure 2 | Excerpt from https://support.apple.com/en-us/HT204770

This error only affects our BLP-1276-1.4 and BLP-1275-1.4 that are compatible with iPhone 4S and iPhone 4 devices. *Empire Scientific* is working on a permanent solution for this problem, but to keep customers well-informed, a disclaimer will be added to the packaging of the two select iPhone batteries, and any reference material will also be updated.