



Controller Recovery Process

EFILive Support - 2021-07-21 - GM Help

Where device and controller restrictions are implemented on a tune file, an unrestricted stock tune should be full flashed. For AutoCal, the AutoCal Remote License *MUST* be set to give AutoCal permission to flash the tune file.

LS1, LB7, LLY, AL5 Controller Recovery

These controllers use a communications protocol that is not very robust and was replaced in 2006. In many cases, these controllers fail with factory tools and will be unrecoverable.

Please read the [LB7 and LLY Tips and Tricks](#) help document. To attempt to recover a failed LS1, LB7, LLY or AL5 controller;

Full Flash

1. **DO NOT REMOVE POWER FROM THE CONTROLLER.** As long as the controller remains powered up, EFILive's proprietary boot loader running in the controller will continue to wait for a successful full flash procedure. Retry the full flash procedure until it is successful.
2. **POWER REMOVED FROM CONTROLLER.** If power has been removed from the controller, it may only be recoverable if the flash was at least 15%-20% complete and the communication portion of the operating system was reprogrammed to allow the controller to continue to operate in dead poll mode. Retry the full flash procedure.

If flashing it fails with a "no communications" error then the controller has probably been rendered inoperable and unrecoverable. The only way to recover the controller is to disassemble it and physically remove, reprogram and replace the flash chip on the main circuit board.

Calibration Flash

A calibration-flash failure is not critical and will generally not result in an unrecoverable controller. To recover from a failed calibration only flash, turn the ignition off, wait 30 seconds, turn the ignition back on, wait a further 10 seconds, the retry the calibration only flash.

If the calibration only flash continues to fail:

1. Remove battery power from the controller, by either removing the controller's fuse or by disconnecting the battery from the vehicle.
2. Wait 30 seconds.
3. Reconnect power.

4. Retry the calibration only flash.

Controller Recovery (All Other Controllers)

A flash failure will normally not render these controllers inoperable because the controller's built in boot block is not erased and will continue to allow the controller to be reprogrammed after the failure. To recover from a flash failure, retry the flash process again.

If the flash continues to fail:

1. Update software and firmware to the latest public release versions.
2. Remove battery power from the controller, by either removing the controller's fuse or by disconnecting the battery from the vehicle.
3. Wait 30 seconds.
4. Reconnect power.
5. Attempt to full flash the controller with a stock tune.

Related Content

- [Problem Flashing a Controller](#)
- [VIN License Replacement Policy](#)