Switch on the Fly

User Guide v1

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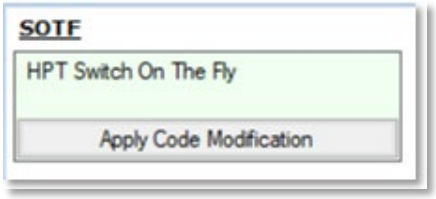
Contents

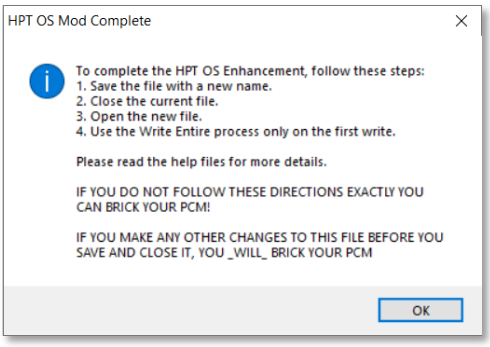
HP Tuners Switch on the Fly

We are proud to introduce "Switch on the Fly" (SOTF), the world's first integrated ECM map switching solution for GM L5D/L5P applications! This feature has been designed to work seamlessly with your vehicle as if it were included from the factory. Follow these simple instructions to configure the feature on your calibration and learn how to utilize the switching interface.

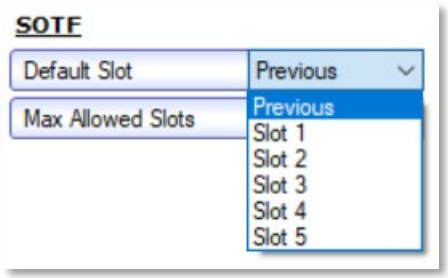
Preparing the ECM

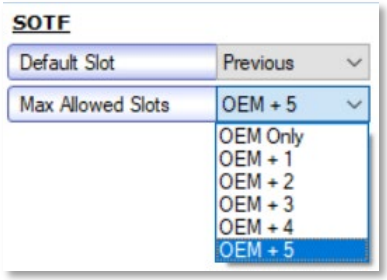
Step 1: Apply the Operating System (OS) SOTF code modification, save as new, close, and reload your HPT calibration.



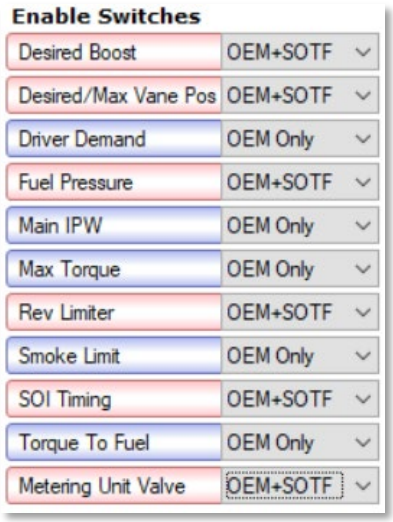


Step 2: Configure SOTF feature settings*.



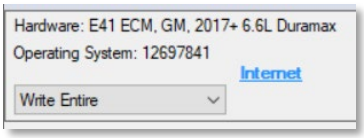


Step 3: Enable and Calibrate individual SOTF tables as desired.



Note: By default, all switchable tables are disabled and will use the OEM table lookup.

Step 4: Flash the ECM using Write Entire.



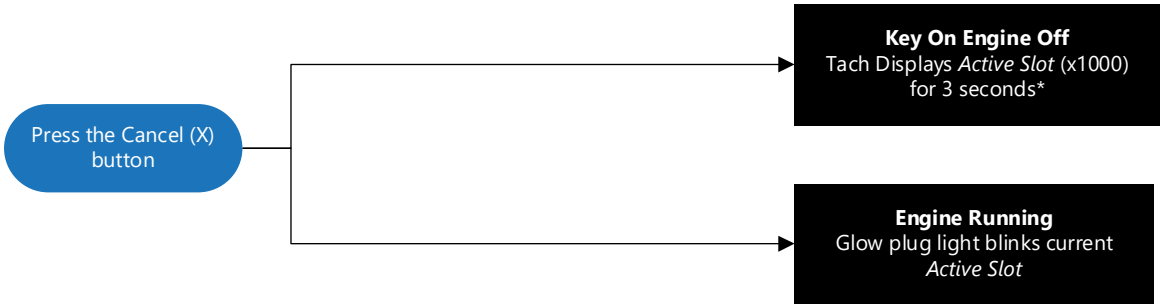
Note: This type of flash is only necessary once and takes approximately 7 minutes.

Using Switch on the Fly (Cruise Control Method)

Step 1: Meet switching requirements

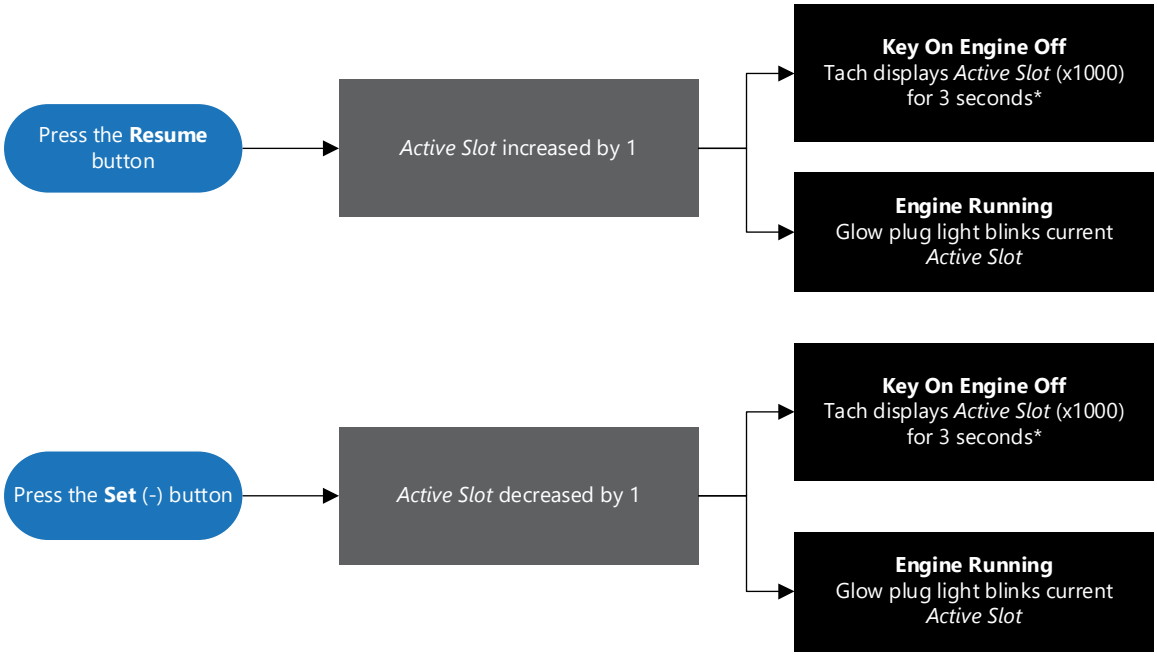
- Vehicle must be equipped with OEM cruise control hardware and steering wheel.
- Vehicle must be On or Running, and Cruise Control must be deactivated.

Step 2: Activate the Switching Menu



Once activated, switching slots is available for 10 seconds.

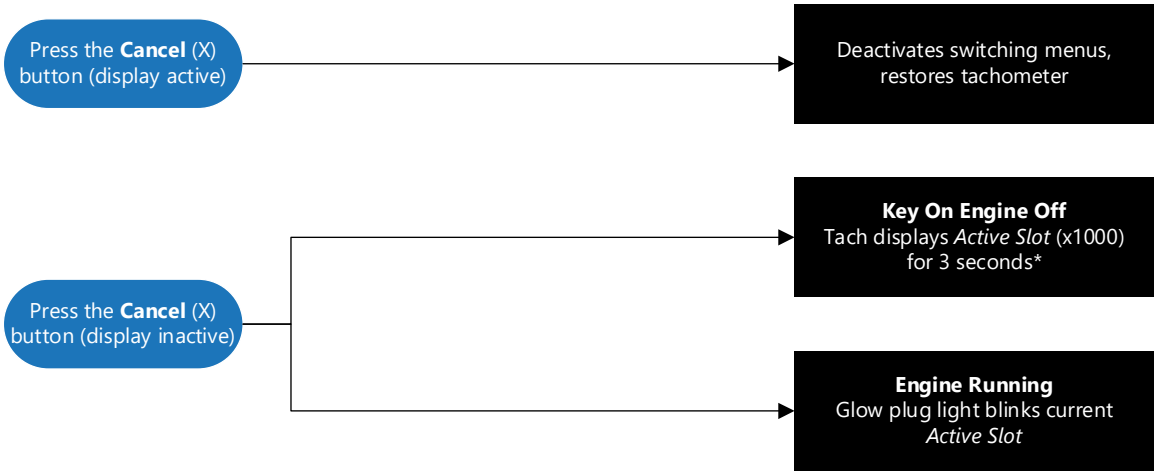
Step 3: Now that we are activated



Active Slot will be limited to the Max Allowed Slots calibration setting

Step 4: Deactivate the Switching Menu

The switching menu will automatically deactivate after 10 seconds if no buttons are pressed



***Tachometer display during engine operation is disallowed for driver safety.**

FAQs

Q: Can I use this feature with an aftermarket steering wheel?
A: Yes! This feature is available when using the HPT Diesel Switch.

Q: I forgot what slot I'm currently in, how can I tell which slot is active?
A: Use VCM Scanner to monitor the "Active Slot" parameter or press the "Coast" button.

Q: I made a bunch of calibration changes, but nothing seems to change when I switch slots?
A: Make sure that each set of SOTF tables has the SOTF Enable set to "OEM+SOTF".

Q: I set my **Default Slot** to 4 but when I start the car it is Slot 0, what's going on?
A: If the **Default Slot** is greater than the **Max Allowed Slots** it will default to Slot 0.

Q: I shut off the car in Slot 3, and when I started it back up the *Active Slot* was 3! How did that happen?
A: We thought it'd be cool if this feature remembered your previous slot and restored it for you on startup.

Q: I've tried everything, I just can't get this to work! Can you tell me what I'm doing wrong?
A: Yes! Contact us at https://support.hptuners.com to proceed with diagnosing the cause.

Q: Will this work in my (insert currently unsupported application here)?
A: We will be adding more applications based on demand and availability!

Combustion Mode Override

The combustion mode override is an HP Tuners exclusive per-slot configurable feature! Due to the severe complexity of the engine controller, the combustion mode can have upwards of 22 different and unique profiles. At times, these modes can switch unexpectedly and cause tables that may not be calibrated or desired to be used. We have made this a breeze to configure as to ensure that calibration data in the SOTF tables is used by the ECM under the exact conditions you expect.

To use this feature simply open the ***Configuration*** table corresponding to the *Map Slot* and set any conflicting mode to a value of 1 (On). Then adjust the minimum requirements as needed to activate the override. The example below will override Modes 2, 5, and 7 when the temperature requirements are met, and will ignore the *Accelerator Pedal Position* requirement.

Note: Mode 1 is inherently active with the override feature and does not need to be enabled in the ***Configuration*** tables.

Configuration Example (Override Modes 2, 5, and 7)