Using Your Fish Tuning Digital CSP5 Switch

The first section covers the functions of the switch when the ignition is on. The second section covers configuring the switch by pressing buttons while you turn on the ignition.

The Features of Your New Digital CSP5 Switch

- Instantly change to any tune with one button press
- Lock in any tune till the password is entered
- Always be on your chosen tune when you turn the key on. No more cold morning starts on the wrong tune!
- May be configured to start with a password required so strangers can't easily change tunes
- May be logically removed from the CAN bus for testing.
- May be used as a tune indicator for testing other switches
- Effectively prevents other devices from changing the tune. Not really, but it will generally change it back where it belongs within 1/20 of a second.
- The current tune will be shown with $1, 2, 3, 4, 5$ or 7. The displays shows the tune reported by the ECM so if it doesn't yet know the tune, it will show a 7.
- The switch will not allow any other device to successfully change the tune. Well, more correctly, if it sees the tune has been changed, it will immediately change it back. I've always thought that if the driver installs a switch, that the passenger should not be able to use the scan tool to mess with him.

Document conventions

- Button presses will be shown using: **1**, **2**, **3**, **4** or **5**.
- The current display will be shown using: A, b, H, L, U, n, etc....

Default Settings

- Start locked off
- Startup tune set to 1
- Password length set to four
- Password set to: 1, 2, 3, 4

Lock Mode

- Any time you see an L displayed, the switch is locked
- If the switch is set to start locked or it's locked in a tune you will have to enter the password to exit. In most other cases, removing power will get you out of locked mode.

Button Combinations That Work With the Ignition On

Changing Tunes

- Press any single button to instantly switch tunes. The display will indicate the current tune.
- Press and hold any single button until the display changes to P and the switch will be locked in that tune until you enter the lock code. This lasts even through key off/key on cycles and overrides the default start up tune. As soon as you enter the password this will be forgotten.

Adjusting Brightness

- Press buttons **1** and **2** together to increase brightness.
- Press buttons **4** and **5** together to decrease brightness.
- Press buttons **1** and **2** for 3 seconds to enable the backlight.
- Press buttons **4** and **5** for 3 seconds to disable the backlight.
- 50 seconds after the last adjustment, the setting will be saved.

Disabling the Start Locked Mode

- If you've enabled start locked mode, pressing and holding buttons **3** and **5** until L appears and then entering the password will disable start locked mode. After correctly entering the password a u will appear to indicate that the start locked feature has been disabled.

Show Firmware Version

- Press and hold **2** and **4** until the display goes blank. Release the button and the version will be displayed followed by a $\bar{\imath}$ and then back to normal.

Tune Display Only

- Press and hold **1** and **5** until the display shows r and then quickly release the buttons. Until you press another button the display will

show the current tune as reported by the ECM. This mode is mostly useful for testing another switch. Under normal conditions if you try to use another switch to change the tune, this switch will immediately change the tune back to where it belongs. Press any button to exit this mode.

CAN Off Mode

- Press and hold **1** and **5** past the r until the display shows $\bar{-}.$ When you release the display will show $F_l\ 5h\ t\upsilon nl\ n\bar{U}$ over and over again. While that is being displayed the switch is as far removed from the CAN bus as it can get without pulling its connector. This display will also appear when someone else on the CAN bus asks for quiet, normally this should only happen when you attempt to flash the ECM.
- The only way to exit this mode is to press a button. If this display is showing when you are leaving the truck, press a key to exit so the switch will go to sleep.

Show Internal Messages

- Press and hold **(2**, **3**, **4)**, **(1, 2, 4)** or **(2**, **3**, **5)** to show the $\Pi\!\Pi\!\Pi\!\Pi$, $\Pi\!\Pi\!\Pi\!\Pi\!\Pi$ or $F_l\ 5h\ t\upsilon nl\ n\bar{U}$ messages. If there are no CAN messages on the bus you will get the $\Pi\!\Pi\!\Pi\!\Pi$ message and if the ECM replies NO CSP5 you will get that message. You should never see the NO CSP5 message. The NO CAN message should appear a few seconds after you turn off the key, right before it goes to sleep.

Changing the Password

- Everything about passwords will be covered in the passwords section of this document.

Button Combinations That Work at Power-On

Note that none of these work if the switch is currently in start locked or tune locked mode. If you keep your switch in start locked mode, you will need to turn off start locked mode before using these features, and then turn it back on when you're finished.

If you've wired in your switch or it's not reasonable to power off your switch, these functions may also be accessed by:

- pressing and holding buttons **1**, **2**, **4** and **5** until you see a $\boldsymbol{t}$ displayed
- Enter the lock code at the $\boldsymbol{L}$ until a $\boldsymbol{t}$ appears again
- Now press and hold the keys indicated below until the display changes

Setting the Default Start-Up Tune

- Hold any single button until that number appears during power up to set the default start-up tune.

Setting the Start Locked Flag

- To enable the start locked feature, press and hold buttons **1** and **2** at power-up and then enter the password.
- Once you set this, the switch will always start at your chosen start-up tune, but the display will show $\boldsymbol{L}$ at start-up and will not accept commands until you correctly enter the password. This is useful if you want to be able to loan your truck to a friend. If you've pressed and held a button to lock a different tune, that will override this until you unlock the switch.

Setting the Password Length

- To set the password length, press and hold buttons **4** and **5** at power-up and then enter the password. See below for complete instructions.

The Password

- The default password is 1, 2, 3, 4, 1, 2, 3, 4. If your password is less than eight digits long you will only need to enter the first password length digits of the password.
- The password length may be set to anything between four and eight characters long.
- When you see an $\boldsymbol{L}$ displayed the only way out is to enter the password or turn off the power. If you're in tune locked or start locked mode, powering down will not help as it will still be locked at power up.
- The password length when shipped is four and so the out of the box password is **1**, **2**, **3**, **4**.

Changing the Password

- Pressing buttons **1** and **4** together for five seconds will let you enter a new password. At the L , enter the current lock code, at the E enter a new lock code and then at the H, enter the new lock code a second time. If you do all three steps correctly the new code will be saved and an H will appear (indicating that Happiness has been achieved ☺), otherwise, you'll see an F for failure.

Password functionality

- When locked, the display shows L . While entering the password the display will show H, b, C and then the current tune. If it shows H, b, C and then L , you entered the password wrong and need to try again.
- If you have more than a four character password, the display uses as much of the series $H, b, C, d, E, F, 7$ as needed. The letters tell you which digit you're entering.
- When you're holding buttons to reach a place requiring a password, the display will change to P to acknowledge that your request has been accepted.

Adjusting Password Length

- The password length may be adjusted to 4, 5, 6, 7 or 8 digits long depending on the level of security you desire.
- To change the password length first turn off start locked mode.
- Then press and hold buttons **4** and **5** while turning on the key.
- Hold the buttons until the display changes to $\bar{=}$.
- Release the buttons and enter the password.
- Wait for the display to show B.
- Now press one button:
- **1** for a password length of four (625 combinations)
- **2** for a password length of five (3,125 combinations)
- **3** for a password length of six (15,625 combinations)
- **4** for a password length of seven (78,125 combinations)
- **5** for a password length of eight (390,625 combinations)
- The password is now set to the default 1, 2, 3, 4, 1, 2, 3, 4. You only need as much of that as your choice requires so if you chose a password length of six the password would be 1, 2, 3, 4, 1, 2.

- You should change your password after doing this as the default 1, 2, 3, 4, 1, 2, 3, 4 is not very secure.

Restoring Your Switch to the Factory Defaults

- This is possible for you to do with our help.

Installing Your Digital CSP5 Switch

- Mount the switch in an available gauge location. Please make sure the wire is not hanging off the back of the switch in a way that it might get stepped on or pulled. Neatly run the OBD cable to the OBD connector and plug it in. Connect the red wire to a source of switched 12V.