Calibration Of The CC30E & LT42E Throttle Position Sensor (TPS) For GEN 1 VCM & GEN 2 VCM

INDEX:

IMPORTANT:

Use Figure 1 on Page 1 and Figure 2 on Page 2 for identifying which VCM (**GEN 1 VCM** or **GEN 2 VCM**) your Cub Cadet **CC30E** or **LT42E** has before proceeding to the Calibration procedures.

The **GEN 1 VCM** buttons are shown in Figure 1.

GEN 1 VCM

BATTERY LED CHARGE INDICATOR

CRUISE CONTROL

HEADLIGHT

START

PTO

RMC

PTO LED INDICATOR

RMC LED INDICATOR
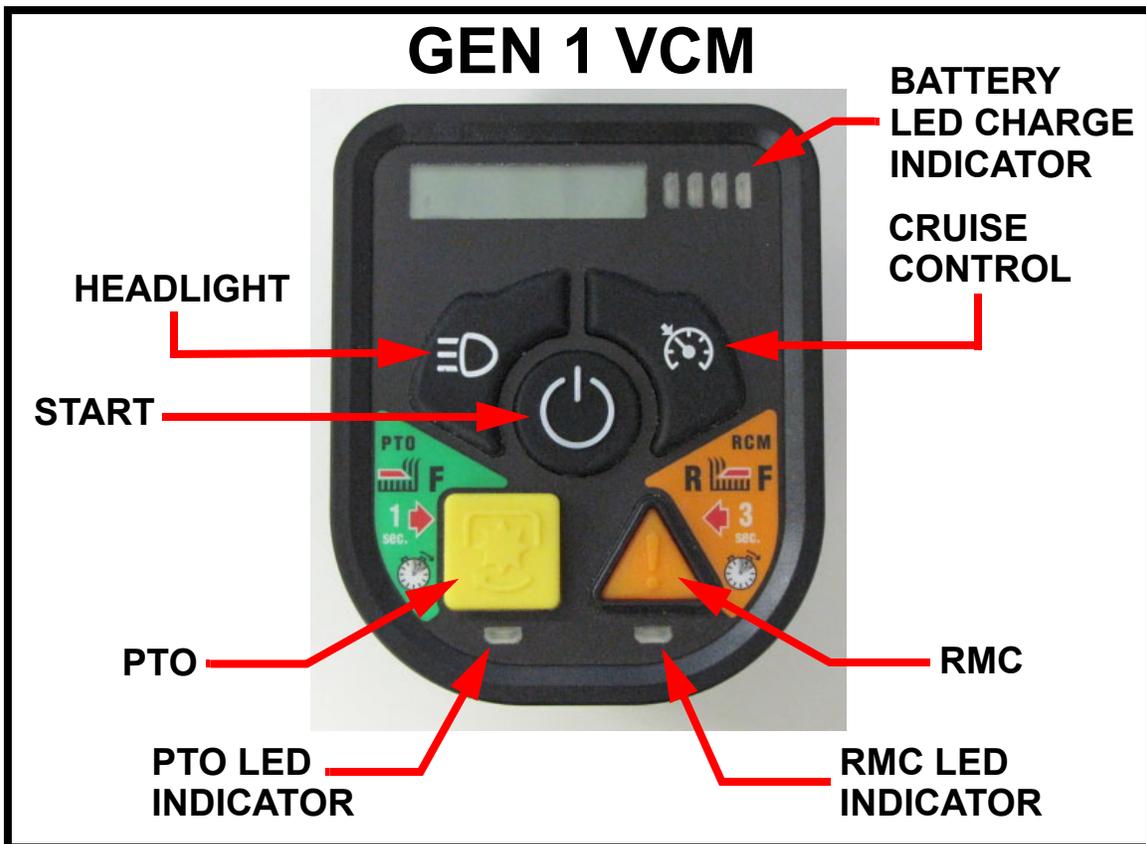
FIGURE 1

The **GEN 2 VCM** buttons are shown in Figure 2.
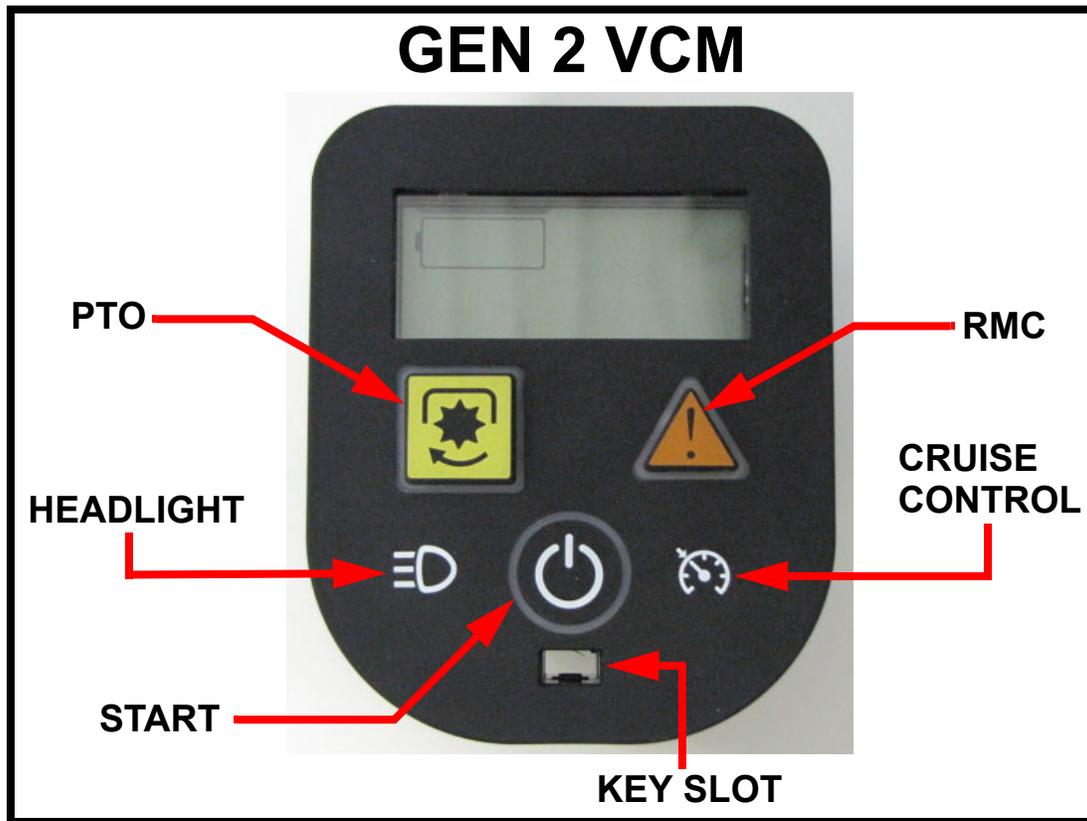
FIGURE 2

Proceed to Page 4 for the **GEN 2 VCM** Calibration procedures.

Calibration Of The GEN 1 VCM

IMPORTANT: The Brake must be released. <u>DO</u> <u>NOT</u> touch the brake pedal during any of the calibration procedures.

Step 1:

TPS Calibration

- The TPS must be calibrated every time that the:
- VCM is replaced.
- TPS is disconnected.

Step 2:

TPS Calibration

- Move the Key Switch to the "OFF" position.
- Hold down the Reverse Caution Mode (RMC) and the Headlight buttons while turning the Key Switch to the "ON" position.
- Continue to hold the Headlight and RMC buttons down until the red RMC LED illuminates.

Step 3:

TPS Calibration

- **NOTE:** *New VCM's will be in calibration mode until they are calibrated for the first time.*
- Let go of Headlight and RMC buttons.
- The RMC LED should be on.

Step 4:

TPS Calibration

- Press the Forward Drive Pedal down until it hits a hard stop.
- Press and release the Cruise Control button.
- Release the Drive Pedal.

Step 5:

TPS Calibration

- Press the Reverse Pedal down until it hits a hard stop.
- Press & release the PTO button.
- Release the Reverse Pedal.
- Without touching any of the drive pedals, press the Start button.

Step 6:

TPS Calibration

- To save and exit the Calibration Mode, press the Mow in Reverse and Headlight buttons simultaneously.
- The PTO and RMC LED's should turn off.
- Turn the Key "OFF"
- Test drive the mower in a safe area before returning it back in to service.

Calibration Of The GEN 2 VCM

IMPORTANT: *The Brake must be released.* <u>*DO*</u> <u>*NOT*</u> *touch the brake pedal during any of the calibration procedures. The GEN 2 VCM (625-06950) will Not save a calibration input if the Brake Pedal is depressed.*

1. Begin Calibration of the **GEN 2 VCM** (**625-06950**).
- Insert the key into the VCM.
- Chock the rear wheels.
- A new VCM is shipped in calibration mode as seen in Figure 1.
- To place a VCM in calibration mode, press and hold the RMC and Headlight Buttons for 7 seconds until the **F N R** icons show on the screen as in Figure 1.

FIGURE 1

NOTE: *The Following Sequence MUST be met for Correct Calibration.*

2. Slowly Press the Forward Throttle Pedal until it stops.
- Press the Cruise Button.
- "F" will be boxed in. See Figure 2.

FIGURE 2

NOTE: *The GEN 2 VCM will Not save a calibration input if the brake pedal is depressed.*

3. Release the Forward Throttle Pedal.
NOTE: *Both pedals must be released and in the neutral position.*
- Press the Start Button and release.
- "N" will now have a box around it. See Figure 3.
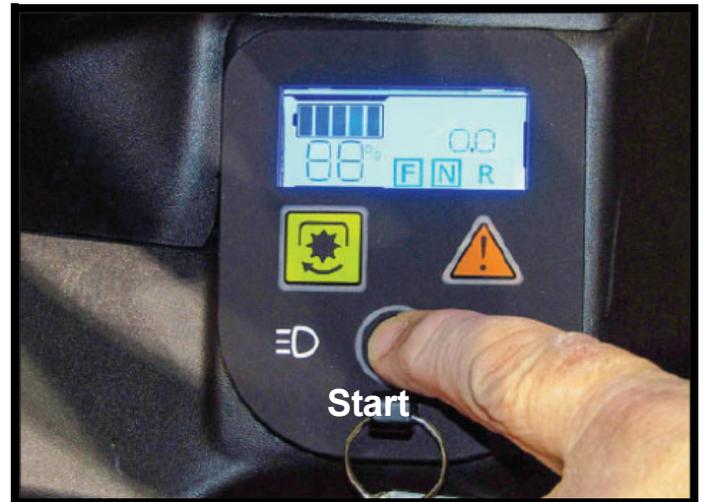
FIGURE 3

4. Slowly Press the Reverse Throttle Pedal until it stops.
- Press the PTO Button and release.
- The VCM screen will change to the Start Screen. This indicates the calibration has been updated. See Figure 4. This completes the calibration process.
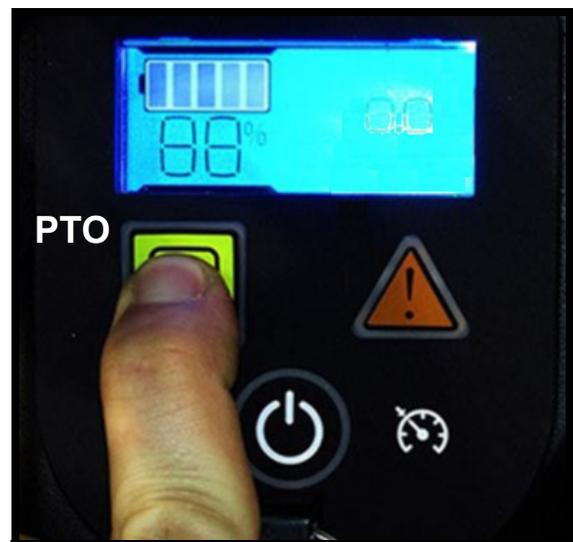
FIGURE 4

NOTE: *If the PTO button is held longer than 7 seconds an E107 error code will appear. Restart the calibration process from Step 1.*

7. Start the rider, test & confirm all operating features work properly and as designed. Return rider back in to service.

DRM