

2022 and Newer Club Car Onward Throttle Parameter Changes Using 1313 Curtis Handheld Programmer With Throttle Wiring Connection Changes

#### WIRING CONNECTIONS NEEDED TO BE MADE FOR 2022 AND UP CLUB CAR ONWARD

NOTE: Starting with the model year 2022 of the Club Car Onward, the vehicle now uses a fully electronic throttle. The wiring harness that is provided by HPEVS now has new connections that need to be made to have a functional throttle. The following instruction set will guide the installer.

1. Locate the provided wiring harness from HPEVS.



**2.** The Black/White wire within the HPEVS wiring harness is now connected using a 3/16" quick disconnect plug. Disconnect this connection.





Locate the Red/White wire within the wiring harness that has a 3/16" female quick disconnect. Connect this wire with the Black/White wire that has the 3/16" male disconnect.





**4.** Lastly, connect the two green wires together. On one side, a green wire has a 1/4" male quick disconnect. The other green WIRE has a 1/4" female quick disconnect and is connected through black shrink tubing to the red/white wire.



**5.** When completed, the connections made need to resemble what is shown in the photo below.



### **CONNECTING TO THE MOTOR CONTROLLER**

#### NOTE: Please read this manual thoroughly prior to downloading firmware

**Scope:** This instruction set describes the procedure to change the parameters in the Curtis F-Series motor controller using the Curtis 1313 Handheld programmer.

# **Tools Needed**

- 1. Curtis Instruments 1313 Handheld Programmer
- 2. Curtis Handheld CAT-5 to DB-9 dongle
- 3. 2 AA batteries
- 4. DB-9 pin connector to 6-pin Molex connector or DB-9 to 4-pin Molex connector



Curtis Handheld DB-9 dongle 1313 w/dongle attached





DB-9 to 6-pin Molex

#### **CHANGING PARAMETERS IN THE F-SERIES MOTOR CONTROLLER**

- 1. Install the 2 AA batteries in the 1313 Handheld programmer.
- 2. Locate and attached the DB-9 dongle to the bottom port of the Curtis 1313 handheld programmer.



3. Disconnect the 6-pin Molex plug that is attached to the 3140 Curtis display.



4. Locate the DB-9 plug to 6-pin Molex connector pigtail that was provided from HPEVS. If one of these pigtails was not provided, contact HPEVS for a replacement.



- 5. Plug in the DB-9 connector from the 1313 Handheld programmer into the DB-9 to 6-pin Molex connector.
- 6. Plug in the 6-pin Molex connector from the DB-9 to 6-pin Molex connector into the 6pin Molex connector from the 3140 Curtis display.



7. Power on the motor controller.

#### **CONNECTING TO THE MOTOR CONTROLLER DEVICE**

1. After the 1313 Handheld has finished searching for nodes, the main screen will be displayed (Devices tab will be highlighted). With the "Devices" tab highlighted, press the top right button; under the "Select" dialog on the screen to open. (Fig. 1)



Fig. 1

2. With the "Devices" tab open notice the device list. With the device selected that needs to be connected to press the top right button under the "Connect" dialog displayed on the screen. (Fig. 2)



Fig. 2

3. The handheld will return to the main screen and will also display a progress bar located at the bottom of the screen. (Fig. 3)



Fig. 3

#### **ACCESSING THE MOTOR CONTROLLER PARAMETERS**

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- 1. Using the right arrow on the handheld programmer, scroll over and highlight the "Programmer" tab. Press the button under the "Select" dialog box to open. (Fig. 4)

Fig. 4

2. With the Programmer screen open, press the down button to highlight "User Settings". Press the right arrow on the handheld programmer to enter this folder. (Fig. 5)



Fig. 5

3. With "User Settings" open, once again, use the down arrow to highlight "Throttle". Press the right arrow to enter the "Throttle" parameter block. (Fig. 6, Fig.7)



Fig. 6



Fig. 7

#### **CHANGING THE MOTOR CONTROLLER PARAMETERS**

 With the "Throttle" folder open note the four parameters. Using the down arrow highlight the "Pedal Interlock Type" parameter. To change this parameter from "Normal" to "Electronic Onward" depress the "+" button. (Fig. 9, Fig. 10)



Fig. 9

Fig. 10

2. Cycle the key switch off and then on for the parameter change to take effect.

# CONTINUE TO PROGRAMMING THE THROTTLE INSTRUCTIONS LOCATED WITHIN THIS DOCUMENT BELOW



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# Instructions to Program Golf Car Throttle F-Series Motor Controller

SW Version: 1.10 and up

<u>Disclaimer</u>: Changes to the programming, through which this manual gives instructions on how to perform, are straightforward. Making changes to certain parameters can lead to a situation where the user can lose control of the vehicle, which can lead to injury or death. Care should be taken to read the instructions and understand them thoroughly before making any changes to the parameters.

CAUTION: DO NOT HANDLE THE ELECTRICAL CONNECTORS WHEN THE SYSTEM IS ENERGIZED. DOUBLE CHECK THE VOLTAGE POTENTIAL WITH A VOLTAGE METER PRIOR TO HANDLING. FAILURE TO DO SO WILL RESULT IN INJURY OR DEATH!

## **Golf Car Throttle Programming**

**Scope:** The HPEVS golf car software package developed for the F-series Curtis AC motor controller utilizes the Curtis 3140 display in tandem with the golf cars throttle pedal and key switch to program dead band and maximum inputs of the golf cars throttle into the motor controller input parameters. This procedure needs to be performed the first time after the system has been installed and is functional, or anytime a throttle unit has been replaced.

**PROCESS:** To program the motor controller to the golf cars installed throttle:

- 1. Turn off the golf car.
- 2. Make sure the forward/reverse switch is in the neutral position.
- 3. Fully depress the throttle to the floor.
- 4. Turn on the golf car.

If the above process was done correctly, the 3140 Curtis display should be displaying the following:



5. Return the throttle pedal to the neutral position, foot off the throttle.

6. When the throttle returns to the neutral position, the dead band will now need to be programmed. The 3140 display will show the following.



 Slowly depress the throttle foot pedal until the display shows that the dead band has been set. The 3140 display will show the following when the dead band has been set. The numerical value will or will not be the same as shown.



8. After the dead band has been set, the 3140 display will instruct the user to turn off the system. The 3140 display will show the following.



9. The motor controller is now programmed with the throttle inputs associated to throttle installed in the car. Cycle the key switch and drive the car to verify the throttle functionality.