

5.4 Setting the potentiometer for E-motor mode within the range of diesel motor throttle lever

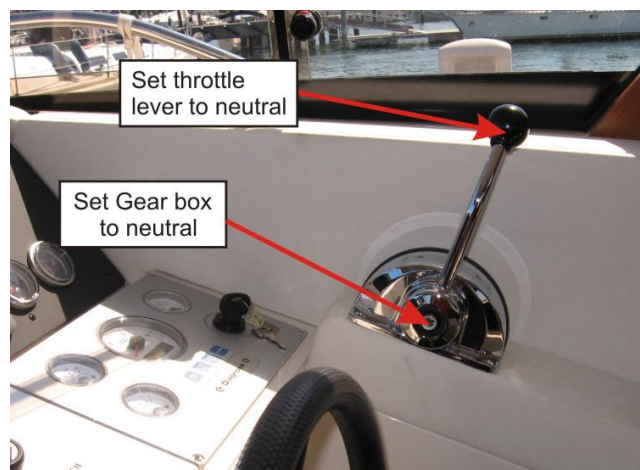
1. Main switches between 48 V battery and HCU unit must be set to **OFF**.



S5 – Hybrid Drive switch – HCU connection switch

S6 – Hybrid House/battery switch – Lipo battery connection switch

2. **Warning:** Set the transmission box to neutral.



Set the gear box to neutral

3. Make a connection with the connector jumper on cable from connection box.



Cable and connector jumper

4. Set the **Diesel / Electro** switch to **Diesel** position.

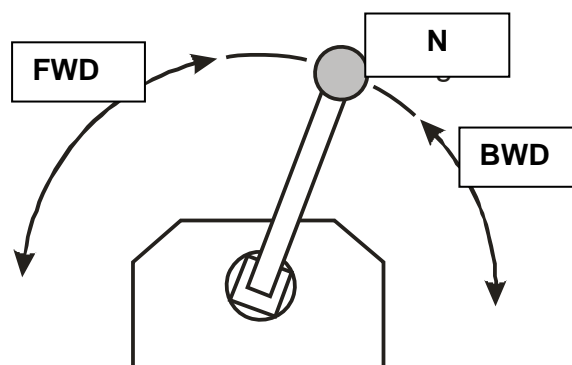


Diesel position – make sure the clutch activator is in diesel position (clutch disengaged – diesel and electro engine connected) if it was in electro mode previously (you can hear the activator sound when switching between the modes).

Turn the ignition key to ON position, so you establish the contact (do not turn the key to start position – there is no need to start the engine).

5. Again check the throttle lever is in neutral position.

Throttle lever has positions Forward (FWD), Backward (BWD) and Neutral. Throttle lever might have different angles at maximal shift from Neutral to maximal FWD and to maximal BWD position.



Throttle lever

6. Connect the HCU unit to 48 V battery by setting the main switch of 48 V battery to **ON**.



S5 – Hybrid drive switch is the connection switch to the HCU.

Note: If however for some reason you have a different wiring in your system, you can turn ON both switches (S5 and S6), this is OK for the calibration in any wiring system.

7. Notice on the dashboard the DDI has turned ON (power is supplied when the (ignition key is in ON position and switch S5 or (S5 and S6 are ON)).



DDI ON

8. Then immediately after the DDI turned ON (you have max.5 seconds) push the throttle lever to its end position in the direction forward or backward where the angle from the neutral position is smaller.

9. Wait at least 5 seconds.

10. Leave the lever in its end position.

11. Turn the ignition key to OFF position.

12. Disconnect the HCU unit from 48 V battery by setting main switch of 48 V battery to **OFF**, S5 or (S5 and S6).

13. **Remove the connector jumper from the cable.**

14. Position the throttle lever to neutral position.

15. Use this sequence to test the functioning of the system in electric mode.



In clockwise order turn ON the switches:

1. S1 – 12 V engine battery switch
2. S2 – Parallel switch
3. S3 – 12 V service battery switch
4. S5 – Hybrid drive switch
5. S6 – Hybrid house/battery switch

16. Turn the Hybrid switch on the dash board to electric mode, ignition key to ON position, wait until the actuator has engaged clutch, up to 5 seconds (electric engine is detached from diesel engine).



17. Test the speed of rotation of electric motor in both end positions of throttle lever. The test is done in idle run of electric motor with full throttle-max. revolutions.

The Data display interface (DDI) should display in forward position of the throttle:

E-motor app. 1400 rpm

Battery current draw from 28A to 40A

Repeat the procedure if maximal speed is not achieved.