

## **Ultrex Quest Operations**

#### **DESCRIPTION**

In this session, you will:

- Access, via hands-on disassembly, key components of the Ultrex Quest Motor.
- Learn the names and terminology associated with key components
- Learn the function and purpose of the Steering Sensor Board
- Learn the function of main board components
  - Limit Sensors
  - Momentary Switch
  - Potentiometer
  - Network Port
  - Steering Output
  - Motor Coms
- Learn basic interactions with GPS Navigation and how to use them as a diagnostic tool.



### **HANDS-ON TASKS:**

- Remove and reinstall a steering Cable
- □ Remove and reinstall the steering sensor board
- ☐ Remove and reinstall the main control board
  - Test limit sensor operation
- □ Pair a Smart Phone open the OBN App and view the error code page.
- ☐ Take note of the remaining steps to access:
  - Steering Housing
  - GPS Navigation
     Controller
  - Motor/Shaft
  - Various MountComponents

### **KEY CONCEPTS:**

- ! Training Motors do not have lift cylinders installed. Always be aware of the pressure of the lift cylinder, disconnect the cylinder if you are removing motor weight from the mount and leaving the mount latched.
- ! Be aware to not wrap your hand around the foot pedal upper. Some motor conditions can result in runaway steering if your hands are wrapped around the foot pedal your fingers may be pinched.
- ☐ Independently testing steering functions via GPS

  Navigation quickly identifies whether a lack of steering is
  the Main Control Board issue or Steering Sensor Board
  issue
- ☐ GPS Navigation operations (i.e. Spotlock) are overridden by any foot pedal command, even unintentional foot pedal commands.
- ☐ L/R orientation of Steering Cables is critical.
  - The cables are reversed at the steering housing end
- ☐ High amp draw from a steering housing will cause error codes and lockouts.
- ☐ Error codes will be the key to determining what components are malfunctioning in many cases.



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