

Description

In this session you will:

- Access, via hands-on disassembly, key components of the Ultrex 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 Output
- Learn basic interactions with i-Pilot and i-Pilot Link 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 the amp draw of the steering housing
 - Test limit sensor operation
- Take note of the remaining steps to access:
 - Steering Housing
 - GPS Navigation Controller
 - Motor/Shaft
 - Various Mount Components

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 in the deployed position.
- ! 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 i-Pilot/i-Pilot Link 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.
- Steering Amp Draw, when direct tested at 12 volts, should be less than 1 at all times and be a very consistent number. High amp draw from a steering housing will damage the main control board.

