

Description

In this session you will:

- Access, via hands-on disassembly, key components of the Vantage Motor.
- Learn the names and terminology associated with key components
- Learn the functions of the main board
 - Lift/Trim Functions
 - Upper/Lower Limits
 - Motor Lower Unit Operation
 - Wiring to Handle Control Board
- Understand the significance of the Three conductor leadwire (Red, Black, and Yellow)
- Understand the Rack and Pinion 4X Steering system and its potential fail points
- Understand the lift/Trim System



Hands-on Tasks:

- Disassemble the Motor down to the Extrusion
- Reassemble the Motor

Key Concepts:

- ! **Be aware of pinch points and keep your fingers/hands clear.**
- The lift system is 12V supplied by the Yellow Wire from the Power Lead. 24v on the Yellow wire will destroy the lift system during operation. If multiple voltages are not available connect the Red and Yellow both to +12 Volts, the lower unit will run slow but nothing on the motor will be damaged.
- Small gauge wires from the handle control board are sensitive to intermittent connectivity; Zip tie as a strain relief to prevent tugging on the connectors
- Tape spring assembly always seems upside down, proper assembly is critical to good motor function.
- A bent steering rod or lift screw or lift yoke will contribute to increased resistance and cause the lift/trim system to fail
- When setting the tension on the lift belt keep it very loose, the motor cap pulls the lift belt pulley tighter, so if it is at normal tension when being accessed it will be too tight upon assembly.

