

2022-03-12 (Sat)

Lift Self-Correcting logic to prevent the Lift arms from slowly creeping upward during the match.

In ClimberSubsystem constructor

Reset Climber encoders on Falcon motors. (talonFX.encoder.reset)

Initialize self-Correction variables (init values)

minValue = 0

maxValue = 14900

safetyOffset = 3506

midValue = (maxEncoder + minEncoder)/2 (value=7450)

selfCorrection = true // self-correction flag

In Robot.teleOpInit

Go back to init Values

While Robot is running (teleOp mode)

In Climber subsystem

If (**selfCorrection**==true)

get **encoderValue** using talonFX.getSensorCollection.getIntegratedSensorAbsolutePosition

When **encoderValue** is > (**maxValue** - **safetyOffset**)

Lower Arm to **midValue**

If climberButtonPressed Then disable SelfCorrection

selfCorrection = false

Disable SelfCorrection (override) by pressing **Start** button (to start using the Lift manually)

Re-Enable SelfCorrection by pressing **Back** button (re-enable SelfCorrection, stop using the Lift manually)