

2022-03-10

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

In Robot.autonomousInit

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

Initialize self-Correction variables (init values)

minEncoder to talonFX.getAbsEncoder value + some **safetyOffset** at startup

midValue = (**maxEncoder** + **minEncoder**)/2

maxValue = Constant (determined at test/build time)

safetyOffset = Constant (determined at test/build time)

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)

Check encoder value talonFX.getAbsEncoder

When encoderValue is > **maxValue**

Lower to midValue

If climberButtonPressed Then disable SelfCorrection

selfCorrection = false