Transcript: how to add a THROTTLE onto a PEDAL ASSIST bike

Video ID: OvUsCHpLQVA

Extraction Date: 2025-04-02 06:46:14

**[00:00:00]** today I'm going to show you how to add a

**[00:00:02]** throttle onto a pedal assist bike

**[00:00:08]** if you're new to this channel then make

**[00:00:11]** sure to hit that subscribe button all

**[00:00:13]** main parts will be linked in the

**[00:00:14]** description and let's get started

**[00:00:18]** the bike will be modifying is a hyper

**[00:00:21]** air ride the electric mountain bike

**[00:00:23]** which comes with a pedal assist feature

**[00:00:26]** but does not come with a throttle which

**[00:00:28]** for some people is not as fun my

**[00:00:32]** solution is to mount a throttle onto the

**[00:00:34]** handlebar but while some e-bikes are

**[00:00:37]** compatible with throttles others are not

**[00:00:40]** to find out if this one is compatible

**[00:00:43]** we'll have to remove the battery and

**[00:00:45]** have a look at the motor controller

**[00:00:56]** while there appears to be a pedal assist

**[00:00:59]** cable power cables brake cables and

**[00:01:03]** display cables there doesn't seem to be

**[00:01:05]** a throttle cable

**[00:01:07]** so my backup plan is to go online and

**[00:01:11]** buy a motor controller that is

**[00:01:13]** compatible with the throttle I found a

**[00:01:15]** motor controller with the same specs as

**[00:01:18]** the one from the bike

**[00:01:19]** 36 volts nominal voltage and 13 amps

**[00:01:23]** maximum current or 250 Watts Peak it

**[00:01:27]** also comes with a display that has a

**[00:01:29]** built-in throttle perfect

**[00:01:32]** after it arrived we'll have a quick

**[00:01:35]** inspection to verify that the motor

**[00:01:37]** controller's specs are accurate after

**[00:01:40]** that we can swap out the old motor

**[00:01:42]** controller and replace it with a new one

**[00:01:45]** we'll start by chopping the wires

**[00:01:47]** because most of the connectors from the

**[00:01:49]** old controller don't match the new ones

**[00:01:52]** [Music]

**[00:01:58]** when soldering wires I like to start

**[00:02:01]** with the thick ones first and then move

**[00:02:03]** on to the thinner ones this cable is

**[00:02:05]** from the motor which comes with two

**[00:02:08]** pairs of wires one is the whole sensor

**[00:02:11]** pair which tells a motor controller in

**[00:02:13]** what position the motor is in and the

**[00:02:16]** second one is the power pair which

**[00:02:18]** physically makes the motor spin

**[00:02:27]** [Music]

**[00:02:36]** foreign

**[00:02:47]** this motor controller also comes with a

**[00:02:50]** pedal assist wire so by connecting it

**[00:02:52]** onto the pedal assist sensor will later

**[00:02:55]** on have an option to use pedal assist

**[00:02:57]** mode now that all the old wiring from

**[00:03:00]** the bike is connected to the new

**[00:03:02]** controller we can now move on to

**[00:03:04]** mounting the display to mount the

**[00:03:07]** display will firstly have to remove the

**[00:03:09]** handle grip and the gear shifter

**[00:03:16]** after the display is slid onto the

**[00:03:18]** handlebar we can slide back the brake

**[00:03:21]** lever and gear shifter in place

**[00:03:26]** we'll tighten down the brake lever

**[00:03:28]** followed by the gear shifter and then

**[00:03:31]** the display

**[00:03:39]** after everything is secured we can force

**[00:03:43]** back on the handle grip I also removed

**[00:03:46]** the old display since we won't be using

**[00:03:49]** it anymore

**[00:04:01]** all that's left to do now is to feed the

**[00:04:04]** display cable through the bike's frame

**[00:04:07]** and then hook it up to the display

**[00:04:14]** before taking the bike outside let's pop

**[00:04:18]** in the battery and give it a test

**[00:04:29]** it works Let's Take It Outside and have

**[00:04:33]** some fun with it

**[00:05:08]** okay

**[00:05:12]** [Music]

**[00:05:15]** after riding around the e-bike for a

**[00:05:18]** while Let's test the top speed if you're

**[00:05:21]** thinking to yourself doesn't the display

**[00:05:23]** have a speedometer well the problem is

**[00:05:27]** that I'm not sure if the speedometer

**[00:05:29]** from the e-bike is 100 accurate but you

**[00:05:32]** know what is 100 accurate GPS so this

**[00:05:37]** display in the side is a live view from

**[00:05:39]** iPhone's GPS let's do this

**[00:05:57]** wow 22 miles per hour that's faster than

**[00:06:01]** I can ride a pedal bike

**[00:06:05]** let's do one more test and see if the

**[00:06:08]** pedal assist works it takes a second to

**[00:06:11]** kick in but when it does it kind of

**[00:06:13]** feels like someone is pushing you

**[00:06:21]** if you like this video then make sure to

**[00:06:23]** subscribe and hit the notification Bell

**[00:06:26]** in order not to miss any of my new

**[00:06:28]** videos

# Full Text (without timestamps)

today I'm going to show you how to add a throttle onto a pedal assist bike if you're new to this channel then make sure to hit that subscribe button all main parts will be linked in the description and let's get started the bike will be modifying is a hyper air ride the electric mountain bike which comes with a pedal assist feature but does not come with a throttle which for some people is not as fun my solution is to mount a throttle onto the handlebar but while some e-bikes are compatible with throttles others are not to find out if this one is compatible we'll have to remove the battery and have a look at the motor controller while there appears to be a pedal assist cable power cables brake cables and display cables there doesn't seem to be a throttle cable so my backup plan is to go online and buy a motor controller that is compatible with the throttle I found a motor controller with the same specs as the one from the bike 36 volts nominal voltage and 13 amps maximum current or 250 Watts Peak it also comes with a display that has a built-in throttle perfect after it arrived we'll have a quick inspection to verify that the motor controller's specs are accurate after that we can swap out the old motor controller and replace it with a new one we'll start by chopping the wires because most of the connectors from the old controller don't match the new ones [Music] when soldering wires I like to start with the thick ones first and then move on to the thinner ones this cable is from the motor which comes with two pairs of wires one is the whole sensor pair which tells a motor controller in what position the motor is in and the second one is the power pair which physically makes the motor spin [Music] foreign this motor controller also comes with a pedal assist wire so by connecting it onto the pedal assist sensor will later on have an option to use pedal assist mode now that all the old wiring from the bike is connected to the new controller we can now move on to mounting the display to mount the display will firstly have to remove the handle grip and the gear shifter after the display is slid onto the handlebar we can slide back the brake lever and gear shifter in place we'll tighten down the brake lever followed by the gear shifter and then the display after everything is secured we can force back on the handle grip I also removed the old display since we won't be using it anymore all that's left to do now is to feed the display cable through the bike's frame and then hook it up to the display before taking the bike outside let's pop in the battery and give it a test it works Let's Take It Outside and have some fun with it okay [Music] after riding around the e-bike for a while Let's test the top speed if you're thinking to yourself doesn't the display have a speedometer well the problem is that I'm not sure if the speedometer from the e-bike is 100 accurate but you know what is 100 accurate GPS so this display in the side is a live view from iPhone's GPS let's do this wow 22 miles per hour that's faster than I can ride a pedal bike let's do one more test and see if the pedal assist works it takes a second to kick in but when it does it kind of feels like someone is pushing you if you like this video then make sure to subscribe and hit the notification Bell in order not to miss any of my new videos