



# How to Intonate an Electric Guitar

Intonating an electric guitar is critical to sounding good while you play. This guide will show you how to do it yourself, saving time and money!

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## INTRODUCTION

This guide was written to help new guitar players take full control of their sound. Part of doing that is ensuring that your intonation is set so the notes you play remain in tune no matter where on the neck of the guitar you are fretting. This guide will show you both the process of intonation as well as my best practice for intonation which will save you time and money.



### TOOLS:

- [Phillips #3 Screwdriver](#) (1)
  - [5-10 ft 1/4" Guitar Cable](#) (1)
  - [Chromatic Tuner](#) (1)
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## Step 1 — How to Intonate an Electric Guitar



- Attach your guitar to your chromatic tuner using a 1/4" guitar cable, ensuring cable is completely inserted.
- Connect your chromatic tuner to a power source (if necessary) and power it on.
- ① You will be leaving the guitar connected to the chromatic tuner for the duration of this guide.

## Step 2



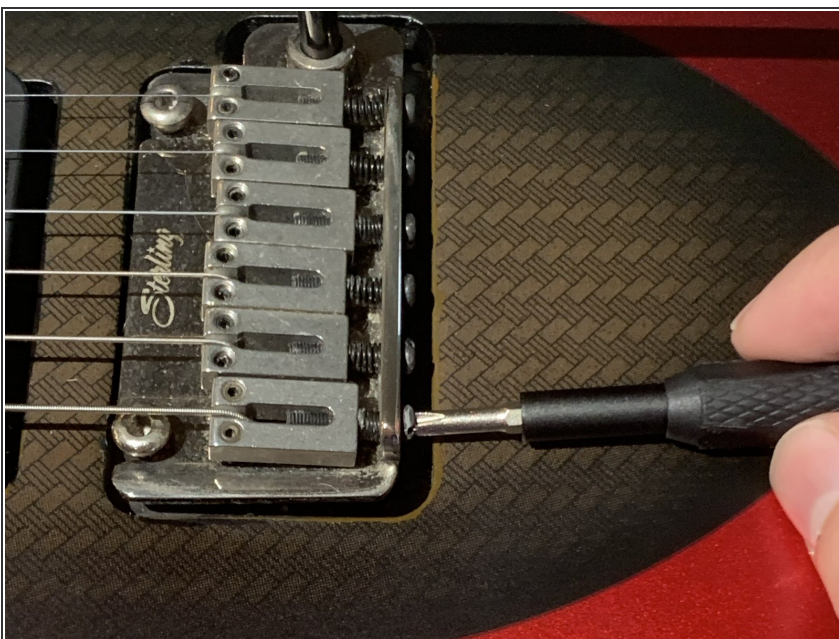
- Tune your strings to your desired pitch by playing a note on an open string (not pressing down on any frets) and adjusting the tuning pegs.
- ① For this guide the tuning used is E Standard. This tuning standard uses the following notes, from thickest string to thinnest: E A D G B E

### Step 3



- Check your string intonation by pressing the string down at the 12th fret and playing a note.
  - ⓘ This checks the tuning of your string at a higher octave, and is a good representation of your current intonation. You want this to be as close to in-tune as possible. The second picture of this step shows an extremely out-of-tune case.

### Step 4



- Adjust your saddle position using a Philips-head screwdriver.
  - ⓘ If your string pitch was **flat**, left of center, adjust the saddle **towards the neck of the guitar** (loosen). Otherwise, if the string pitch was **sharp**, adjust the saddle **towards the bridge** (tighten).

⚠ Make small adjustments, no more than a quarter to a half rotation at a time. Otherwise you run the risk of breaking a string.

## Step 5



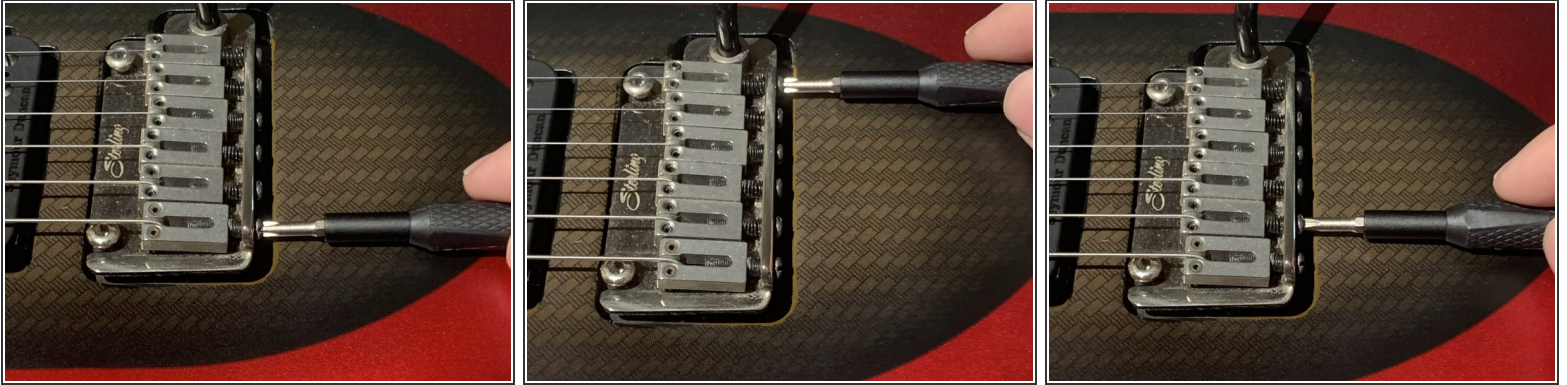
- Tune the adjusted string back to the proper pitch.
  - ❗ Depending on the amount of the adjustment, the pitch of the string can change quite a bit.
- Once the string is in tune in the open (no frets being held), check the tuning at the 12th fret again.

## Step 6



- Repeat Steps 2 through 4 until the string is intonated.
  - ❗ This process can require multiple repetitions to complete depending on how "off" the intonation is.

## Step 7



- Adjust the intonation of the remainder of the strings by repeating Steps 1-5 for each string.
  - ① The best way to do this is to follow the "6, 1, 5, 2, 4, 3" method. This is where you start with the outer strings and work inward. This method is illustrated in the provided images.
  - ① This method helps to preserve the tunings of the strings you are not adjusting when the guitar is equipped with a tremolo arm (Whammy Bar).

After following this guide you should have a properly intonated electric guitar. No matter the note you should now be able to enjoy good tuning across all frets.