# A Basic Instruction for the Setup and Adjustment for the New Fender Mustang Owner.

The following setup procedures and specifications are for a Fender Mustang bass. This is a basic primer for the new bass owner. I wish I had one. If you are a seasoned and accomplished musician and used to doing your own setup you might find this a bit simple and incomplete. Modifications of the specs may also be made (within limited parameters) to adjust for your individual playing style or application (i.e., how hard you pick, finger, slap, pop or fret the bass). To begin with the following is the recommended minimum specs from Fender for the Mustang Bass.

NECK RELIEF
9.5” Radius
.012” (0.3 mm)

STRING HEIGHT
Bass - 6/64” (2.4 mm) feeler gauge .610+.584+.559+.533+.127 mm = E & A strings
Treble - 5/64” (2 mm) feeler gauge .610+.584+.559+.254 mm = D & G strings
All strings are measured at the 12th fret.

PICKUP HEIGHT
Standard “P” and “J”
Bass 7/64” (2.8 mm) .610+.584+.559+.533+.508 mm
Treble 5/64 (2 mm) .610+.584+.559+.254 mm

Note: These are minimum specifications that are meant as a guide; they should not be construed as hard and fast rules, as I realize that every player's subjective requirements often differ.

TOOLS NEEDED
Set of automotive feeler gauges (.002-.025) (0.05–1 mm)
6" (150 mm) ruler (with 1/32" and 1/64" increments) (0.5 mm increments)
Light machine oil (3-in-1, toy locomotive or gun oil)
Phillips screwdriver
Electronic tuner
Wire cutters
Peg winder
Polish and cloth

STRINGS
New strings can breathe new life into your bass. For strings to stay in tune, they should be

changed regularly. To check if your strings need changing, run a finger underneath the string and feel for dirt, rust or flat spots. If you find any of these, you should change your strings.

Many companies offer numerous variety of bass strings. Which should I use? That is a personal choice that only trying each type out can answer. I go to the local guitar store and try out as many as they have on their display models. Buying a set and discovering you don't like them can become quite pricey after the second or third time.

TUNING KEYS

How you wind the strings onto the pegs is very important. Start by loading them through the bridge and then loading them onto the appropriate keys as follows:

Standard keys.

I was taught after running the string through bridge to cut at the point of the next 2 tuning posts and about ¼ to ½ inch beyond. Then put a 90 degree bend ½ to ¾ inch in from the cut end. Then thread the end, bend and all into the post hole until you feel a click. That means the string is set. Then hand wind one or two wraps around the tuning post clockwise as tight as your hand will allow. Then while pressing the string down on the headstock with your right hand start your tighten turns by hand for 2 or 3 turns. This will start the winding process. With your 3rd hand (jk) use your winder to complete the process. Do not wind to tuning but tight enough where the string will not untwist from the post. Do this for each string. Now a little imagination might be needed for the D and G strings as there are not two posts beyond them. More imagination for the G string especially.

For more in depth and specific instructions visit your manufacturer's site

Because of the amount of tension on the neck, it's advisable to replace and tune each new string before removing the next string. After the whole set is changed and tuned, stretch your strings properly by holding them at the first fret and hooking your fingers under each string (one at a time) and then tugging lightly, moving your hand from the bridge to the neck. Re-tune and repeat several times.

What a lot of instructions tend to leave out is many of the bass strings come silk wound at both ends. It is possible after cutting to size for the silk to unwind. I myself like to put that 90 degree bend approximately ½ to ¾ of an inch past th

INTONATION (ROUGHING IT OUT)

Note: I have never used this method. After all is done and ings are in tune I use the saddle screws to adjust them to intonation no matter where they are initially set using the fine intonatis step is unnecessary and time consuming.

TRUSS ROD
First, check your tuning. Affix a capo at the first fret and depress the fourth string at the last fret. With a feeler gauge, check the gap between the bottom of the string and the top of the 8th fret—see the spec chart below for the proper gap.

Caution: Because of the amount of string tension on the neck, you should loosen the strings before adjusting the truss rod. After the adjustment is made, re-tune the strings and re-check the gap with the feeler gauge.

Adjustment at headstock (allen wrench): Sight down the edge of the fingerboard from behind the headstock, looking toward the body of the instrument. If the neck is too concave (action too high), turn the truss rod nut clockwise to remove excess relief. If the neck is too convex (strings too close to the fingerboard), turn the truss rod nut counter-clockwise to allow the string tension to pull more relief into the neck. Check your tuning, then re-check the gap with the feeler gauge and re-adjust as needed.

Adjustment at neck joint (phillips screwdriver): Sight down the edge of the fingerboard from behind the body, looking up toward the headstock of the instrument. If the neck is too concave (action too high), turn the truss rod nut clockwise to remove excess relief. If the neck is too convex (strings too close to the fingerboard), turn the truss rod nut counter-clockwise to allow the string tension to pull more relief into the neck. Check your tuning, then re-check the gap with the feeler gauge and re-adjust as needed.

Note: In either case, if you meet excessive resistance when adjusting the truss rod, if your instrument needs constant adjustment, if adjusting the truss rod has no effect on the neck, or if you're simply not comfortable making this type of adjustment yourself, take your instrument to your local guitar professional!
I have actually broken necks trying this process. Thank goodness they were on cheap unwanted instruments.

Neck Radius
7.25"
9.5" to 12"
15" to 17"  Relief
.014" (0.35 mm)
.012" (0.3 mm)
.010" (0.25 mm)

ACTION
Here is the meat of the matter.
Note: These are manufacturers minimum specifications and can be used as a starting point. That is what I do. Bring everything to "spec" and fine adjust from there. These are not hard and

fast rules.

Players with a light touch can get away with lower action; others need higher action to avoid rattles. First, check tuning. Using a 6" (150 mm) ruler, measure the distance between bottom of strings and top of the 17th fret. Adjust bridge saddles to the height according to the chart below, then re-tune. Experiment with the height until the desired sound and feel is achieved.

Neck Radius
7.25"
9.5" to 12"
7/64” (2.8 mm)

MUSTANG PJ
15" to 17"
6/64" (2.4 mm)  .610+.584+.559+.533+.127
5/64" (2 mm)  .610+.584+.559+.254

NUT HEIGHT (press 3rd fret)
Now this is personal taste and action dependent. For those of us who suffer physical issues ie RA, stroke effects (numbness, weakness) etc this comes in handy. You can only set your action so much adjusting your bridge saddles before experiencing fret or string buzz or hitting your pickups. For this you will need:
Small oval jewelers file
Either a folded $1 bill or feeler gauge set to 0.218mm.
String winder
I find a small level is handy at times but not necessary.
1st press on the 3rd fret of the G string and slide the folded $1 bill (or gauge) between the string and first fret. If the string does not touch the bill then the nut should be filed down to where the string just touches the bill or gauge. REMEMBER you can always file a bit more if needed but you never can replace it if you file to much. Discretion is the better part of valor in this case.
Do this for each nut groove down the line.
Keep in mind the angle of the headstock and file accordingly.
Note: Each string will need to be loosened to the point of moving far enough from it's groove as not be hit with the file and then replaced and re-tuned to remeasure.
Mostly I do this at string replacement time and use the old strings as measurement tools. Who cares if you hit them with the file? They are going to be tossed anway. Usually.
If any of these instructions makes you uncomfortable then take the bass to a professional.

SHIMMING

Note: I feel strongly that this should be done by a professional. For that reason I have left it out.

PICKUPS

Note: This is another one of those personal preference adjustments and a good starting point. Fine tuning can be done when all is set.

Setting pickups too high can cause a number of unusual occurrences. Depress strings at last fret. Using a 6" (150 mm) ruler, measure the distance from the bottom of the first and fourth strings to top of the pole piece. A good rule of thumb is that the distance should be greatest at the fourth-string neck pickup position and closest at the first-string bridge pickup position. Follow the measurement guidelines from the chart below as starting points. The distance will vary according to the amount of magnetic pull from the pickup.

Note: Larger string gauges need wider vibrational allowances. If you have a five-string bass or are using heavier-gauge strings, your measurements must be increased accordingly.

Standard "J" or "P"
Bass 7/64" (2.8 mm) .610+.584+.559+.533+.508
Treble 5/64” (2 mm) .610+.584+.559+.254

INTONATION (FINE TUNING)
Adjustments should be made after all of the above have been accomplished.
Check tuning. Check each string at the 12th fret, (make sure you are depressing the string evenly to the fret, not the fingerboard). If sharp, lengthen the string by adjusting the saddle back turning the saddle screw clockwise. If flat, shorten the string by moving the saddle forward turning the saddle screw counter clockwise. Remember, basses are tempered instruments! Re-tune, play and make further adjustments as needed.

ADDITIONAL HINTS
There are a few other things that you can do to optimize your tuning stability that have more to do with playing and tuning habits.

Each time you play your bass, before you do your final tuning, play for a few minutes to allow the strings to warm up. Metal expands when warm and contracts when cool. After you've played a few riffs and done a few slaps and pops, you can then do your final tuning. Remember—with most tuning keys, it's preferable to tune up to pitch. However, with locking tuners, go past the note and tune down to pitch. Finally, wipe the strings, neck and bridge with a lint-free cloth after playing. When transporting or storing your bass, even for short periods, avoid leaving it anyplace you wouldn't feel comfortable.