CLEANING

Regular cleaning of your guitar is one of the most important ways you can maintain the finish and lengthen string life. After playing, wipe down your instrument to remove any perspiration from the instrument. Perspiration can actually contain acids that can be corrosive to the strings and metal parts of the guitar.

Gloss finish guitars should be polished with polish formulated specifically for musical instruments, and a soft, treated guitar cloth or a cotton rag. Abrasive rags such as polyester can scratch the finish.

Oil finished guitars should be wiped clean immediately after playing with a dry cotton rag only. If your guitar has become discolored due to extended use or heavy perspiration, factory appearance, see a qualified guitar repair person about methods to restore the oil finish to its original factory appearance.

INSTRUCTION MANUAL
Our congratulations and deepest thanks on making Ibanez your choice of instrument. Ibanez standards are second to none. All Ibanez instruments are set up to our strict quality control standards before shipping.
The purpose of this manual is to explain how to maintain your instrument's finish and to keep your guitar playing as well as it did when it left our factory.
If strings become dirty, discolored, or produce a dull sound or buzz, replace the strings with new ones. For best results we recommend replacing one string at a time, this will help to avoid removing the string tension from the neck. When replacing strings with different gauge strings, it may be necessary to adjust the truss rod tension. (We recommend only qualified technicians perform this.) Instruments that have tremolo systems installed may need to be adjusted after string replacement as changes in string tension can cause the tremolo to raise or lower. Please follow the instructions below for your particular model.

The strings should be tightly wound on to the tuning machines from the top going down in a single pass with 2–3 string wraps around the post. In the case of unmounted guitar strings, the ends of the strings should be prepared as shown in the diagram to prevent unintentional slippage from the posts.

In the case of tuning machines, where the string ends are inserted into the machine heads, the string can be cut to length in advance using a pair of string cutters.

The purpose of a truss rod is to adjust the neck to counteract the neck twist caused by the strings. One of the most frequent reasons is changing string gauges or tuning pitch which can affect string tension. String tension changes may affect the string height and cause fret buzz or notes that don't ring true.

To adjust the truss rod, locate the hole in the neck from which you can insert the correct wrench into the nut and tighten or loosen the rod. Truss rod tension can be measured using a thickness gauge after the strings have been removed. The truss rod tension should be set to a value between 1.5 and 2.0 mm for best results. To adjust the truss rod, loosen the string tension by turning the truss rod nut counter clockwise (loosen) to increase the tension. To tighten the tension, turn clockwise (tighten) to decrease the tension.

Instruments with EQ sections or active pickups have batteries that need be replaced periodically. Replace the battery when the sound becomes distorted or if you notice a volume decrease. To maximize battery life remove the plug from the output jack when the guitar is not in use, this turns off the circuit.

**INTONATION**

Intonation is the operation of adjusting the location of the strings to compensate for different string lengths and gauge. Intonation adjustments are required whenever the guitar action has been adjusted or strings have been changed. Follow the instructions of the particular bridge manual to gauge. Follow the instructions in the relevant bridge manual to adjust the bridge action. Intonation adjustment is the operation of adjusting the location of the bridge saddle to compensate for different string lengths and gauge. Intonation is properly set when the 12th fret note is in tune and the truss rod is adjusted properly. Ibanez action is set at the 5th fret. The action may also need to be readjusted after the neck has been changed or adjusted or strings have been changed to a different gauge. Follow the instructions in the relevant bridge manual to make adjustments.

**ACTION**

Ibanez guitar string action is set at the factory. However there are many reasons that an instrument's string height can change. Instruments can be affected by changes in temperature and moisture. High string action may make the guitar difficult to play. If the string action is too low, fret buzz or unclear notes can occur. To adjust the string action, make sure the guitar is in tune and the truss rod is adjusted properly. Ibanez action is set at the 5th fret. The action may also need to be readjusted after the neck has been changed or adjusted or strings have been changed to a different gauge. Follow the instructions in the relevant bridge manual to make adjustments.

**NECK**

Ibanez steel string guitar necks are equipped with adjustable truss rods. The purpose of a truss rod is to adjust the neck to counteract the neck twist caused by the strings. One of the most frequent reasons is changing string gauges or tuning pitch which can affect string tension. String tension changes may affect the string height and cause fret buzz or notes that don't ring true.

To adjust the truss rod, locate the hole in the neck from which you can insert the correct wrench into the nut and tighten or loosen the rod. Truss rod tension can be measured using a thickness gauge after the strings have been removed. The truss rod tension should be set to a value between 1.5 and 2.0 mm for best results. To adjust the truss rod, loosen the string tension by turning the truss rod nut counter clockwise (loosen) to increase the tension. To tighten the tension, turn clockwise (tighten) to decrease the tension.

**BATTERY**

Instruments that have adjustable pole pieces can be balanced to adjust the output of each string.

**PICKUPS**

The output level of the instrument as well as the quality of the signal can be affected by the pickup height. Pickup height should be adjusted until the volume of bridge and neck pickups is almost equal with both volumes wide open. The volume may drop drastically if the pickup height is too low. As the pickups are magnetic, fret buzzing and distortion may occur if the pickup is too close to the strings. Use a small screwdriver to make adjustments to raise or lower the pickup.

**STRINGS AND TUNING MACHINES**

If strings become dirty, discolored, or produce a dull sound or buzz, replace the strings with new ones. For best results we recommend replacing one string at a time, this will help to avoid removing the string tension from the neck. When replacing strings with different gauge strings, it may be necessary to adjust the truss rod tension. (We recommend only qualified technicians perform this.) Instruments that have tremolo systems installed may need to be adjusted after string replacement as changes in string tension can cause the tremolo to raise or lower. Please follow the instructions below for your particular model.

The strings should be tightly wound on to the tuning machines from the top going down in a single pass with 2–3 string wraps around the post. In the case of unmounted guitar strings, the ends of the strings should be prepared as shown in the diagram to prevent unintentional slippage from the posts.

In the case of tuning machines, where the string ends are inserted into the machine heads, the string can be cut to length in advance using a pair of string cutters.

The purpose of a truss rod is to adjust the neck to counteract the neck twist caused by the strings. One of the most frequent reasons is changing string gauges or tuning pitch which can affect string tension. String tension changes may affect the string height and cause fret buzz or notes that don't ring true.

To adjust the truss rod, locate the hole in the neck from which you can insert the correct wrench into the nut and tighten or loosen the rod. Truss rod tension can be measured using a thickness gauge after the strings have been removed. The truss rod tension should be set to a value between 1.5 and 2.0 mm for best results. To adjust the truss rod, loosen the string tension by turning the truss rod nut counter clockwise (loosen) to increase the tension. To tighten the tension, turn clockwise (tighten) to decrease the tension.

In instruments other than those described above, an acoustic guitar change from the bridge side through to the bass side.

**INTONA TION**

Intonation is the operation of adjusting the location of the strings to compensate for different string lengths and gauge. Intonation adjustments are required whenever the guitar action has been adjusted or strings have been changed. Follow the instructions of the particular bridge manual to adjust the bridge action. Intonation adjustment is the operation of adjusting the location of the bridge saddle to compensate for different string lengths and gauge. Intonation is properly set when the 12th fret note is in tune and the truss rod is adjusted properly. Ibanez action is set at the 5th fret. The action may also need to be readjusted after the neck has been changed or adjusted or strings have been changed to a different gauge. Follow the instructions in the relevant bridge manual to make adjustments.

**ACTION**

Ibanez guitar string action is set at the factory. However there are many reasons that an instrument's string height can change. Instruments can be affected by changes in temperature and moisture. High string action may make the guitar difficult to play. If the string action is too low, fret buzz or unclear notes can occur. To adjust the string action, make sure the guitar is in tune and the truss rod is adjusted properly. Ibanez action is set at the 5th fret. The action may also need to be readjusted after the neck has been changed or adjusted or strings have been changed to a different gauge. Follow the instructions in the relevant bridge manual to make adjustments.
If strings become dirty, discolored, or produce a dull sound or buzz, replace the strings with new ones. For best results we recommend replacing one string at a time, to help avoid removing the string tension from the neck. When replacing strings with different gauge tension, it may be necessary to adjust the truss rod tension. (We recommend only qualified technicians perform this.) Instruments that have tremolo systems installed may need to be adjusted after string changes in string tension can cause the tremolo to raise or lower. Please follow the instructions below for your particular model.

The strings should be tightly wound on to the tuning machines from top to bottom, with 2 to 3 string wraps around the post. In the case of unmounted guitar strings, the ends of the strings should be prepared as shown in the diagram to prevent unintentional slippage from the posts.

In the case of tuning machines, where the string ends are retained into the tuner head, the string can be cut to length in advance using a pair of string cutters. The ends of the strings may be coated in lubricating types. The set screws that can be tightened with a small Phillips head screwdriver to make adjustments to the tuning knob are adjustment screws that can be tightened with a small screwdriver to increase the tension.

To adjust the truss rod, locate the truss rod access hole and turn the truss rod. Truss rod tension should be increased (counter clockwise) and tightened (clockwise) or loosened (counter clockwise). To adjust it by inserting the wrench correct into the rod and tightening (clockwise) or loosening (counter clockwise) the truss rod. Truss rod tension can be measured by inserting a card at the first fret. The clearance can be measured by inserting a card at the first fret. The clearance is referred to as “neck relief.” Too much neck relief can cause buzzing and sound distortion. Using appropriate care must be taken when adjusting the neck and we recommend only qualified technicians perform this procedure.

Ibanez action is set at the factory. However there are many reasons that an instrument's string height can change. Instruments can be affected by changes in temperature and moisture. High string action can affect the guitar difficult to play. If the string action is too low, fret buzz or unclear notes can occur. Action can be affected by the neck and the truss rod is adjusted properly. Ibanez action is set at the 18th fret. The action may also need to be readjusted after the neck has been changed or strings have been changed to a different gauge. Intonation adjustments may be necessary to fix buzz or notes that don't ring true.

Intonation adjustment is the operation of adjusting the location of the strings at the nut to compensate for different string lengths. Intonation adjustment is the operation of adjusting the location of the strings at the nut to compensate for different string lengths. Follow the instructions of the particular bridge manual to adjust the bridge saddle to compensate for different string lengths. Follow the instructions of the particular bridge manual to adjust the bridge saddle to compensate for different string lengths. Follow the instructions in the relevant bridge manual to readjust after the neck has been changed or strings have been changed to a different gauge. Intonation adjustment is the operation of adjusting the location of the strings at the nut to compensate for different string lengths. Follow the instructions of the particular bridge manual to adjust the bridge saddle to compensate for different string lengths. Follow the instructions in the relevant bridge manual to readjust after the neck has been changed or strings have been changed to a different gauge. Intonation adjustment is the operation of adjusting the location of the strings at the nut to compensate for different string lengths. Follow the instructions of the particular bridge manual to adjust the bridge saddle to compensate for different string lengths. Follow the instructions in the relevant bridge manual to readjust after the neck has been changed or strings have been changed to a different gauge. Intonation adjustment is the operation of adjusting the location of the strings at the nut to compensate for different string lengths. Follow the instructions of the particular bridge manual to adjust the bridge saddle to compensate for different string lengths. Follow the instructions in the relevant bridge manual to readjust after the neck has been changed or strings have been changed to a different gauge.
CLEANING

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Gloss finish guitars should be polished with polish formulated specifically for musical instruments, and a soft, treated guitar cloth or a cotton rag. Abrasive rags such as polyester can scratch the finish.

Oil finished guitars should be wiped clean immediately after playing with a dry cotton rag only. If your guitar has become discolored due to extended use or heavy perspiration, factory appearance, see a qualified guitar repair person about methods to restore the oil finish to its original factory appearance.

TUNING

Ibanez guitars and basses tuning standards at the factory are as follows.

<table>
<thead>
<tr>
<th>6-string guitar</th>
<th>7-string guitar</th>
<th>8-string guitar</th>
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</thead>
<tbody>
<tr>
<td>E 4 B3 G3 D3 A2 E2</td>
<td>E 4 B3 G3 D3 A2 E2 B1</td>
<td>E 4 B3 G3 D3 A2 E2</td>
</tr>
</tbody>
</table>

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