

*Instructions  
for your . . .*



TYPHOON IV

# TYPHOON IV NEW FEATURES:

The Typhoon IV, Fretless Bass has many new features including . . . flush fret fingerboard . . . new pickups and harness which extends the range of the electric bass . . . a neck which is 3/4" farther out from the body for easier playing . . . an adjustable mute . . . plus standard Ovation features such as adjustable neck rod . . . quality tuning machines . . . adjustable neck to body angle . . . durable polyester finish . . . fully adjustable bridge . . . fully adjustable pickups.

## THE HARNESS: Function of Controls

Volume Control-Pickup No. 1 — Regulates the loudness of the No. 1 pickup.

Tone Control-Pickup No. 1 — Regulates the quality, from a very deep to a mellow tone.

Volume Control-Pickup No. 2 — Regulates the loudness of the No. 2 pickup.

Tone Control-Pickup No. 2 — Regulates the quality, from a mellow to sharp tone.

**NOTE:** For maximum bass, set tone controls on "O". When the volume controls are set a high setting, there is less chance of hum and the tone controls will be most effective.

## The Selector Switch — 3-position toggle switch

**Deep**—The lowest sound you can achieve, and is produced by the No. 1 pickup only and is controlled by the No. 1 volume control and the No. 1 tone control.

**Mellow**—This setting produces strong full bodied sound and is achieved through the No. 2 pickup only. This position is controlled by the No. 2 volume control and No. 2 tone controls.

**Sharp**—This setting produces the highest pitched sound with least amount of bass and is controlled by both sets of volume and tone controls. It is important when adjusting the volume controls that both are about the same loudness, in order to create a bright sound. In this position both pickups are connected together and the polarity between the pickups is reversed 180° out-of-phase. The result is a near-cancellation of bass frequencies and an increase in treble. In order to get the brightest sound, adjust one of the volume controls until you hear a slight decrease in volume while playing the low "E" string, now both pickup volumes are the same and you will receive the greatest cancellation of bass.

In order to understand the full tonal range of this instrument try the following settings in order.

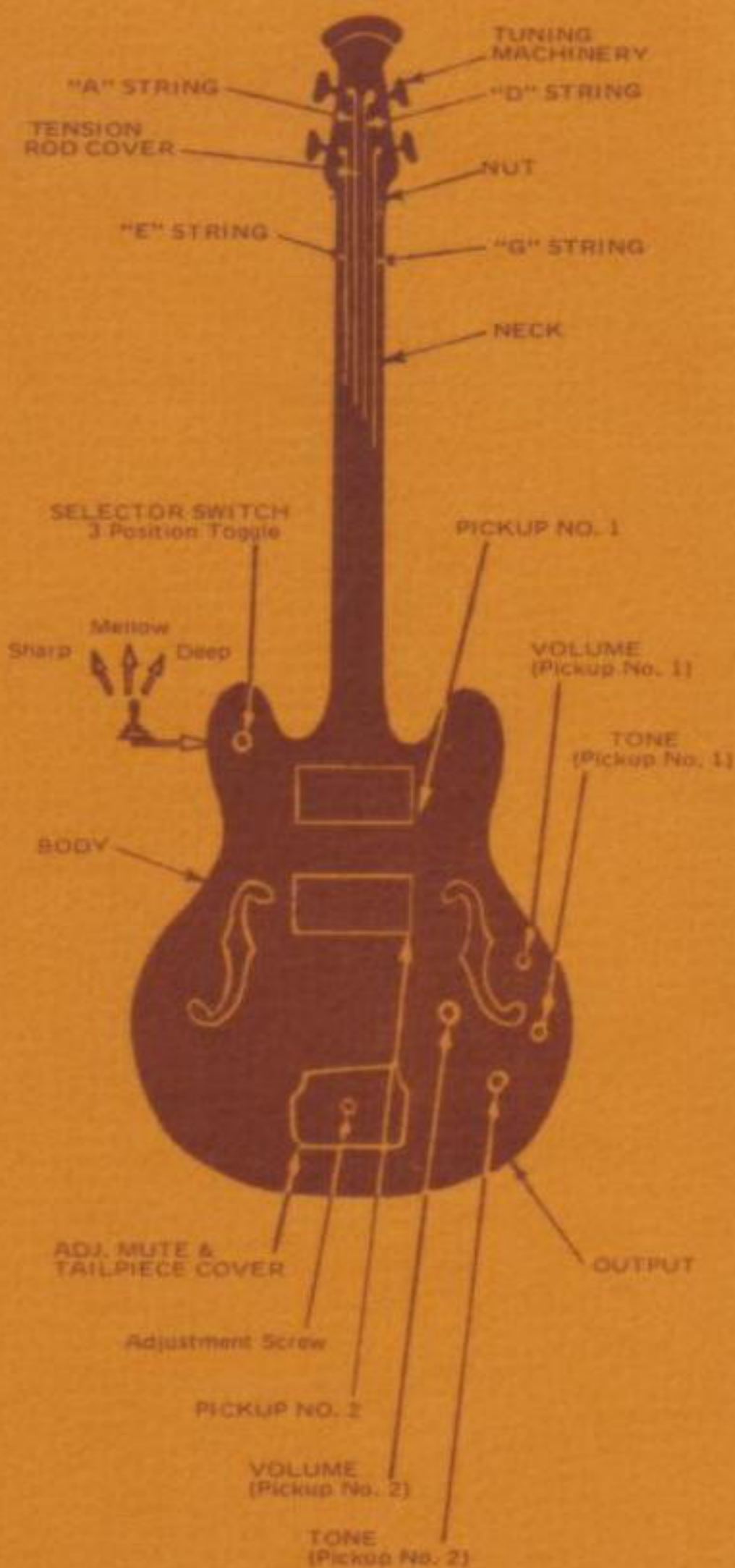
Type of Tone	Vol # 1	Tone #1	Vol # 2	Tone # 2	Sel. Sw. Pos.
1. Very deep	10	1	—	—	Deep
2. Deep	10	10	—	—	Deep
3. Mellow	—	—	10	1	Mellow
4. Driving	—	—	10	10	Mellow
5. Sharp	10	10	10	10	Sharp

## MUTE: Designed to soften the sound of the strings

Adjustment is made with the thumb screw on the middle of the tailpiece cover. Pushing down on the cover frees up this screw and then turning the thumb screw clockwise increases the mute's pressure. Turning the screw counter clockwise will decrease the mutes pressure, until the mute no longer makes contact with the strings. With the mute raised about 1/16" above the strings, a slight downward pressure of the hand or arm on the cover, will activate the mute on all four strings. This makes it possible to activate the mute or release it without missing a note.



# FRETLESS BASS



# TYPHOON IV ADJUSTMENTS:

Adjustments when necessary should be made by an experienced repairman. The following sequence of operations is a guide for him. It is important that you bring this guide to him and he follow this order of succession.

## Typhoon IV Set up guide

### I. Tune the instrument to Standard pitch

- E. — 41.2 Cycles per second
- A — 55 Cycles per second
- D — 73.4 Cycles per second
- G — 98 Cycles per second

### II. Check neck for warp or bow

1. Hold the "E" string down between the nut and first fret marker with your left hand. With your right hand hold the "E" string against the fingerboard at the 17th fret marker.
2. Check the clearance between the bottom of the string and the top of the fingerboard at the 6th fret marker.
3. The clearance should be at least .005" up to ".030" (1/32 inch)
4. Check clearance of "G" string in same manner.
5. If either string touches the fingerboard, the neck is bowed. This will cause the strings to buzz when played at the first few frets. To correct this condition loosen the nut on the tension rod by turning it counter clockwise, until a slight clearance can be seen.

NOTE: For adjustment of the tension rod nut use a 1/4" hex nut driver.

6. If the clearance is greater than .030 the neck is warped and the tension rod nut should be tightened by turning it clockwise. Make sure that you do not completely lose the clearance for either string. Sometimes a little extra warp will help if the strings are buzzing when played.

NOTE: When replacing the tension rod cover, be careful not to strip the screw holes.

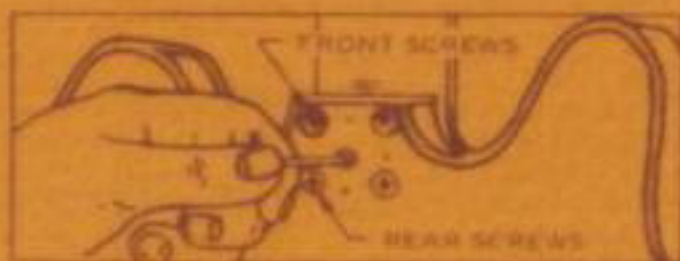
### III. Check the action

The action is measured at the 12th fret by determining the distance from the top of the fingerboard to the bottom of the string. Minimum action setting for the "E" string is 5/32 and for the "G" string it is 1/8 and within 1/64 of an inch. For adjustment use the large black thumb screws at either end of the bridge. If the action can not be adjusted by the bridge adjust the NAA.

### IV. NAA: Neck Attitude Adjustment

This adjusts the angular relationship of the neck to the body of the guitar. NAA should be used only if you cannot set the action properly at the bridge.

1. Set proper bridge height by turning the thumb screws 4 revolutions from the bottom most position.
2. Remove the cover plate on the back of the body.
3. Loosen the two front screws 1/8 of a turn counter clockwise.
4. Loosen the two rear screws four full turns counter clockwise.





5. Using a 1/8 inch Allen wrench adjust the set screw in the center. Turning the screw clockwise will lower the action.
6. When the action has been set, tighten the front screws tightly.
7. Then tighten the rear screws only snugly.
8. Repeat Step III.

#### V. Pickup Height

The spacing between the pickup and the strings is adjusted with the three large screws in the pickup bezel. By holding the "E" and "G" strings down at the 21st fret adjust the pickup parallel to the strings to within 1/16" to 1/8" clearance.

### BASS STRINGS

The Ovation Fretless Bass will accept most standard bass string sets. For a clear sharp tone, a set of strings should last a maximum of two weeks to two months. However, strings need not be replaced unless they break or the winding loosens up from core of the string. Keeping the strings clean will extend their life.

String Replacement is a simple and quick operation if you follow this procedure.



#### To remove the strings

1. Using the thumb screw in the middle of the tailpiece cover adjust the cover up so that there is 1/16" clearance between the mute and the bridge.
2. Loosen the 1st and 4th strings and take them off the machine heads.
3. First push the string towards the bridge and then pull the string to the side, lift it over the tailpiece and remove it.
4. Then remove the 2nd and 3rd strings in the same manner.

#### To replace the strings

1. Thread the string under the rear of the cover and through the slot in the tailpiece.
2. Run the string over its saddle on the bridge and hold it at the end of the peg head.
3. Bend the string at a 90° angle 2 inches beyond its machine head.
4. Then cut the string 1/2 inch beyond the 90° bend.
5. Place the string down into the hole in the tuning machine and tune the string up to pitch.

Any further technical question should be addressed to the Engineering Department of Ovation Instruments.

## PLAYING THE FRETLESS BASS

It is important to realize that the fret markers on the Fretless bass are in the same place that the frets would be if the neck were fretted. For this reason, the forward edge of your finger must be slightly behind or in line with the marker itself, so that the string leaves the finger board over the fret marker. Placing your finger tip on top of the marker or centered between the markers will produce an out of tune note. In the end your ear will be the best guide, to tell if the note is in tune. Effective use of slides and vibratos will let you produce sounds formerly found only on an acoustic bass.



## CARE AND MAINTENANCE

To obtain maximum performance keep your instrument clean and avoid sudden temperature changes. This instrument should be placed in a guitar case and do not store in an extremely damp or dry room.

Johnson's Pledge with Lemon, is recommended for cleaning and polishing, and should be used sparingly.

---

## OWNER NOTES:

---

---

---

---

---

---

---

---

---

---



**OVIATION INSTRUMENTS**

NEW HARTFORD, CONNECTICUT 06155  
DIAL 878-8088 • AREA CODE 203