

Technical Bulletin

HAMMOND ORGAN

"music's most glorious voice"

April 8, 1966

TO ALL MAINTENANCE ENGINEERS - CHANGES

NO. MODELS

31 H-100 Series

SUBJECT: Control Settings

This bulletin is designed to assist you in making various adjustments necessary for the proper operation of organ Model H-100.

It is our intent to have available soon, a complete H-100 Service Manual to assist you in servicing these new models.

By this time you should have received Technical Bulletin #29, with an updated schematic and wiring diagram on this model.

It is our hope that this information, plus the schematic, will assist you in servicing and adjusting these models.

Before any adjustments can be made it will be necessary to:

1. Remove console back cover.
2. Remove console top.
3. Remove screw that secures Harp Assembly to preamplifier, and swing Harp Assembly out.
4. Remove the two covers located on the rear of the Control Panel Assembly.
5. Remove the top cover of the Control Panel Assembly.

All of the following settings are made with:

1. Swell Pedal wide open.
2. "B" adjust key depressed on upper manual.
3. Specified Key (s) depressed on upper manual.
4. Specified drawbar of upper "B" adjust group, pulled out to #8 position except as noted.
5. All tabs "up", except as specified.

NOTE: This bulletin is a confidential letter to the Hammond dealer organization and is not for general distribution.
HAMMOND ORGAN COMPANY, 4200 W. DIVERSEY AVE., CHICAGO, ILL., 60639

6. Meter connected across specified speaker. The "A" speaker is mounted above the power supply. The "B" speaker is above the power amplifier. The "Bass" speaker is the large speaker above the power amplifier.
7. Before starting this procedure, set percussion, pedal level, and reiterate rate controls to a full clockwise position.

<u>Depress Key (s) Shown</u>	<u>Drawbar Used</u>	<u>Tabs Depressed</u>	<u>Item Being Set</u>	<u>Controls to be Adjusted</u>	<u>Meter Across Speaker Indicated</u>	<u>Volt Meter Reading</u>	<u>See Note</u>
25	4	None	B-Channel Output	Chan.B.Level	B	.54 V.	
25	4	On Upper	Vibrato Balance	Vibrato gain	B	.54 V.	A
25	4	None	A-Channel Output	Chan. A Level	A	.54 V.	
25	9	None	Tone	Tone Control	B	.45 V.	B
25	1	None	Bass Output	Bass Chan. Level	Bass	1.5 V.	
1-2-3-4-5	See Note C	On Upper	Reverb Balance	Reverb Level	A		C
13	None	Harp Sustain	Harp Level	Harp Level Control	A	.40 V.	D
25	None	Banjo	Perc. Cutoff	Perc. Cutoff	A	—————→	E
25	None	Banjo & 2nd Voice	Perc. Level	Perc. Level	A	1.3 V.	
25	None	Banjo & Reiterate	Per.Keying Drive	Perc.Keying Drive	A	.36 V.	F
None	None	Reiterate	Reiterate noise nulls	Reiterate Nulls A and B	A	Min.Meter Reading	G
Any Pedal	None	String Bass I	Latching Current	+30 volt Adj.	—————→	—————→	H
Any Pedal	Pedal #4	String Bass I	Pedal Cutoff	Pedal Cutoff	—————→	—————→	J
Pedal #13	Pedal #1	None	Pedal Level	Pedal Level	Bass	6.0 V.	
Any Pedal	None	None	Pedal Click Nulls	Pedal Click Nulls A & B	Bass	Min.Meter Reading	K

NOTES:

- A. The vibrato gain adjustment is the top control on the vibrato drive amplifier board. Before setting this control check the collector voltage of the finned transistor. The case of this transistor is the collector. If the collector voltage is not 70 volts, adjust the bias control above this transistor so that 70 volts is attained.
- B. Connect meter leads across "A" speaker. Output should be $\pm 20\%$ of "B" channel output.
- C. For this step only use the registration 00060708000. With keys 1-2-3-4- and 5 depressed, note meter reading. Now, depress both reverberation tablets and adjust reverb level control so that output is the same as the noted reading, with the reverb tabs up.
- D. This control located on Harp preamp. board.
- E. Adjust this control so that note is barely audible.
- F. This control located on rear of reiterator chassis.
- G. Connect a jumper wire between terminals 3 and 4 on reiterator terminal strip, counting from rear of console.
- H. Connect a DC volt meter between pin 6 of plug P-702 (positive) and ground. Adjust +30 volts control on Power supply so meter reads 18 volts.
- J. Adjust so that pedal signal just disappears.
- K. While moving any pedal up and down, adjust click nulls A and B for minimum thump.

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