

V. Re-Check Work, Power Up and Test

Monday, March 18, 2019 7:15 AM

Re-Check Work

1. Chassis Components
2. Power Section
3. Ground Scheme
4. per Chassis Layout

Power Up Tests

Test #1 - Power On in Standby Mode

1. Set Up
 - a. Tone/Volume/Depth/Speed knobs all set hard left (0)
 - b. Brilliance knob in position 1 (no cap)
 - c. Vibrato Switch set to Vibrato
 - d. Speaker Plugged in
 - e. AC Plugged in
 - f. Power set to On
 - g. Standby Set to Standby
 - h. No Guitar Plugged
2. Test Observation
 - a. Pilot Light On
 - b. Tube Filaments all glowing
 - c. No noises or sparks or funny smells
3. Conclusion
 - a. No Issues/Pass

Test #2 - Power On in Operate Mode

1. Set Up
 - a. Tone/Volume/Depth/Speed knobs all set hard left (0)
 - b. Brilliance knob in position 1 (no cap)
 - c. Speaker Plugged in
 - d. AC Plugged in
 - e. Power set to On
 - f. Standby Set to Operate
 - g. No Guitar Plugged
2. Test Observation
 - a. Annoying Hum from speaker. Medium volume level.
 - b. Other actions that effect this hum:
 - 1) Turning the Top Cut knob just past 2 there is a slight pop, then the hum is completely gone.
 - 2) Turning the Normal Volume knob just past 2 there is a slight pop, then the hum is completely gone.
 - 3) Turning the Vibrato Volume knob just past 2 there is a slight pop, then the hum is completely gone.
 - 4) The hum has less volume with the Vibrato/Tremolo switch in the Tremolo position than the Vibrato position.
 - 5) The Brilliance/Depth/Speed knobs do not affect the hum.
 - 6) Plugging a guitar into the normal input jack with all knobs still at 0, I can hear the

guitar very softly from the speaker through the hum. Turning the Top Cut knob up to just past the point where the Hum goes away, as I turn the Normal Volume up from 0 to towards 3, the soft volume does not change. Then at just over 2 the volume suddenly drops to nothing (zero). Then the volume increases in proportion to the volume knob increasing. The vibrato channel has the same

- 7) Plugging a guitar into the vibrato input jack with all knobs still at 0, I can NOT hear the guitar from the speaker. Turning the Top Cut knob up to just past the point where the Hum goes away, as I turn the Vibrato Volume up from 0 to towards 3 nothing happens. Then at just over 2 the volume increases in proportion to the volume knob increasing.

3. Conclusion

- a. Hum Issue needs to be resolved/Fail
- b. Top Cut/and Volume knobs do not function correctly in the lower range 0-2.5

Test #3 - Test Normal Channel Amplification with Guitar

1. Set Up

- a. Tone/Volume/Depth/Speed knobs all set hard left (0)
- b. Brilliance knob in position 1 (no cap)
- c. Speaker Plugged in
- d. AC Plugged in
- e. Power set to On
- f. Standby Set to Operate
- g. Guitar Plugged into Normal Input Jack with guitar volume turned all the way up
- h. Turn Top Cut up to just past the point where the Hum goes away
- i. Play the guitar

2. Test Observations

- a. I hear the guitar softly (as described above in Test #2)
- b. As I turn up the Volume towards 3, the Amp becomes quiet (like volume level 0)
- c. As I turn up the Normal Volume the amp gets louder all the way to full volume where it is VERY loud as expected
- d. Sounds good all the way up to full volume as expected
- e. Top Cut knob increases treble tone response as expected
- f. Brilliance knob changes tonal qualities as expected
- g. Vibrato Volume/Depth/Speed knobs and Vib/Trem Switch have no effect as expected

3. Conclusion

- a. No Issues/Pass

Test #4 - Test Vibrato Channel with Guitar

1. Set Up

- a. Tone/Volume/Depth/Speed knobs all set hard left (0)
- b. Brilliance knob in position 1 (no cap)
- c. Speaker Plugged in
- d. AC Plugged in
- e. Power set to On
- f. Standby Set to Operate
- g. Guitar Plugged into Vibrato Input Jack with guitar volume turned all the way up
- h. Turn Top Cut up to just past the point where the Hum goes away
- i. Play the guitar

2. Test Observations

- a. Amp is quiet (like volume level 0) all the way to about 2.5 (as described above in Test #2)
- b. As I turn up the Vibrato Volume the amp gets louder all the way to full volume where it is Pretty loud as expected.

- c. But not as Loud as the Normal Channel.
- d. Sounds good at all volume levels
- e. Top Cut knob increases treble tone response as expected
- f. Brilliance knob has no effect on tonal qualities
- g. Depth/Speed knobs and Vib/Trem Switch do nothing. Also tried the foot switch and it did not resolve the issue.

3. Conclusion

- a. Not as Loud as the Normal Channel. Not sure if this is as expected or not.
- b. Brilliance knob has no effect on tonal qualities. Not sure if this is as expected or not.
- c. Depth/Speed knobs and Vib/Trem Switch do nothing