

# TECH TIPS

Service Call:

**Horse Power Limiter board  
adjustments (HPL)**

Tools Needed:

Multimeter  
Small flat blade screwdriver

Model:

**S40/60/80 Z34/45/60**



## Tech Tips Safety Rules



### **Danger**

Failure to obey the instructions and safety rules in the appropriate Operator's Manual and Service Manual for your machine will result in death or serious injury. Many of the hazards identified in the operator's manual are also safety hazards when maintenance and repair procedures are performed.

### **Do Not Perform Maintenance Unless:**

- You are trained and qualified to perform maintenance on this machine.
- You read, understand and obey:
  - manufacturer's instructions and safety rules
  - employer's safety rules and worksite regulations
  - applicable governmental regulations
- You have the appropriate tools, lifting equipment and a suitable workshop.

The information contained in this tech tip is a supplement to the service manual. Consult the appropriate service manual of your machine for safety rules and hazards.

## Step 1

The Horse power limiter board is located in the platform control box.

Attach the negative lead of your volt meter to terminal two and the positive lead to terminal one. Set the rpm toggle switch to the foot pedal/rabbit symbol. Start the engine and step on the foot pedal switch, the voltage reading should be 12v or higher. If not, then stop and troubleshoot low voltage issue.

Leaving the negative lead attached to terminal two, move the positive lead to terminal ten

With the boom in the stowed position, and the rpm toggle switch to the foot pedal/rabbit symbol, start the engine and step on the foot pedal switch. Monitor the voltage on terminal ten of the circuit board.



## Step 2

On the larger machines S60/S80 you should read 11.5 volts.  
On the smaller machines S40/Z45/Z60 you should read 10.0 volts.

On Z34IC machines you should read 8.5 volts

To achieve these voltages use a small flat blade screw driver and adjust the top(A) trim pot counterclockwise to increase voltage and clockwise to decrease voltage.



## Step 3

Keeping your foot on the foot pedal switch, select the rpm toggle switch to the turtle position. Your meter should read 0.1 to 0.3 volts. To adjust turn bottom (C) trim pot counterclockwise to increase and clockwise to decrease the voltage.

After you have set the (C) trim pot to the correct voltage, please return and check the voltage on terminal ten with the engine in high idle. If the voltage has changed from step two, please repeat step two adjustments.



## Step 4

Keeping your foot on the foot pedal switch select the rpm toggle switch back to the foot pedal/rabbit symbol and raise the platform above horizontal. Your voltage on terminal 10 of the circuit board should now read 2.6 to 3.0 volts on the smaller machines S40/Z34/Z45/Z60 and 3.3 to 3.5 on the larger machines S60/S80. To adjust, use the second trim pot down (B) and turn it clockwise to increase and counterclockwise to decrease the voltage.

Note: These voltages are examples and based on the machines driving one foot per second. Time the machines on a flat level surface in a forty foot section. Adjust the voltage to noted drive specifications in the appropriate service manual.

If you cannot adjust the voltages to the drive specifications in the service manual, please contact the Genie Industries Factory Service Department at 1-800-536-1800 for additional assistance.