bias, you will need to shut the amplifier off and let it cool down before you resume.

Tools and resources you will need:

- Small flat screwdriver (non-conductive) for adjusting trimpots
- DC voltmeter
- AC power

Procedure

1. Turn the amplifier's gain controls all the way down. No test signal is needed.
2. Plug the amplifier into an appropriate AC source. Turn the amplifier on.
3. Channel 1: While measuring the DC voltage across resistor R146, adjust trimpot R131 to obtain the voltage listed in Table 1.
4. Channel 2: While measuring the DC voltage across resistor R246, adjust trimpot R231 to obtain the voltage listed in Table 1.

After setting the bias, calibrate the positive and negative current limiting; instructions for the procedure follow below.

4.2 Setting positive and negative current limits

Tools and resources you will need

- Oscilloscope
- 2-ohm resistive load (rated for at least 1200 watts)
- Shorting connector for amplifier output
- Variable AC transformer (e.g., Variac, Powerstat, etc.) rated for 25A (120V) or 12A (230V). Make sure the AC supply is appropriate for the amplifier.
- 1 kHz audio sine wave generator
- Digital multimeter
- Clamp-on digital current meter (e.g., Fluke 30 Clamp Meter)
- Small flat screwdriver (non-conductive) for adjusting trimpots

Procedure

1. Set the audio sine generator to 1 kHz at 1 volt RMS and connect it to Channel 1's input. Connect a 2-ohm load and the oscilloscope probe across Channel 1's output.
2. Turn up Channel 1's gain control partway. On the oscilloscope you should see the amplitude of the sine wave increase accordingly.
3. Turn the gain control back down and apply a short circuit across the output terminals of Channel 1. Clamp a current probe either onto one of the brown wires running to the AC switch or onto the gray output wire from channel 1's module.
4. Turn the gain control all the way up. Adjust trimpots R139 and R140 equally until the current measured falls within the range shown in Table 1.
5. Turn the gain control all the way down and remove the short circuit so the channel drives the 2-ohm load. Turn the gain control back up until the output clips. The voltage at which the signal starts to clip should fall within the range shown in Table 1. If the clipping is asymmetrical, that is, the signal clips on either the positive or negative side first, adjust R139 to make it symmetrical.
6. Turn the gain control down. If the amp has begun to warm up shut it off and let it cool a few minutes before proceeding with Channel 2.
7. Repeat steps 1 through 5 for Channel 2. Use trimpots R239 and R240 to adjust the current limiting in steps 11 and 12.
8. Turn both channels' gain controls all the way down. Clamp the ammeter onto one of the amp's AC wires and check the amp's idle current. If the amplifier is still at about room temperature, the idle current should match the value shown in Table 1.

Table 1: Bias and current limit adjustments

Calibrations	Adjust	RMX 850	RMX 1450	RMX 2450
Channel 1 bias: DC voltage across R146	R131	0.16 V	0.14 V	0.09 V
Channel 2 bias: DC voltage across R246	R231	0.16 V	0.14 V	0.09 V
Output current into shorted load	Channel 1: R139 & R140 Channel 2: R239 & R240	4–4.5 A	4–5 A	8–9 A
AC current when driving shorted load*	Channel 1: R139 & R140 Channel 2: R239 & R240	3.75–4.5 A	4.5–5.5 A	5–6.5 A
Clipping voltage into 2 ohms (RMS)	Channel 1: Adjust R139 for symmetry Channel 2: Adjust R239 for symmetry	26–29 V	33.5–37.5 V	44–49 V
Clipping voltage into 2 ohms (peak)	Channel 1: Adjust R139 for symmetry Channel 2: Adjust R239 for symmetry	36.8–41 V	47.4–53 V	62.2–69.3 V
Idle AC demand* (at ambient temperature; higher when hot)		0.4 A, ±10%	0.4 A, ±10%	0.5 A, ±10%

**Figures shown are for 120V amplifiers; multiply current by 0.5 for 230V.*