TC-366

12-15. Dummy Coil Adjustment

Connection:

As shown in Fig. 12-22.

Adjusting Parts:

L103 (L203) ..... See Fig. 12-2

Switch Settings:

MONITOR switch ..... TAPE
TAPE SPEED switch ..... 19 cm/s (7½ ips)

VR Setting:

AUX VOLUME ..... indicated on page 25

Procedures:

(1) Thread a blank tape.
(2) Deliver a 20 kHz signal of -30 dB (24.5 mV) into the L-CH (R-CH) AUX INput jack and place the machine in stereo-record mode.
(3) Memorize the VTVM reading.
(4) Set the L-CH (R-CH) in record mode.
(5) Adjust L203 (L103) with a non-magnetic screw driver, taking care not to break the core so that the VTVM reading is the same as the reading obtained in preceding procedure (3).

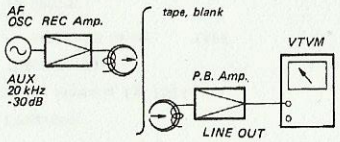

Fig. 12-22 Dummy coil adjustment setup

12-16. Erase Ratio Measurement

Connection:

As shown in Fig. 12-23.

Switch Setting:

MONITOR switch ..... TAPE

VR Setting:

AUX VOLUME ..... indicated on page 25

Procedures:

(1) Thread a blank tape.
(2) Deliver a 1 kHz signal of +10 dB (2.5V) into the AUX INput jack and record the signal on the blank tape.
(3) Rewind the tape and erase a part of the recorded tape (record mode with no signal input).
(4) Memorize the VTVM reading on the recorded part and the erased part of the tape.
(5) Be sure that the ratio of the recorded part to the erased part in level is more than 65 dB.
If not, check the tape pass adjustment and that the erasing current is 80 ~ 120 mA.
To measure the erasing current, connect the two 1Ω resistors in series to the erase head as shown in Fig. 12-24 and the VTVM across the 1Ω resistor.
Be sure that the VTVM reading is 80 ~ 120 mV.

Note: Take impedance-matching correctly for the band-pass filter.

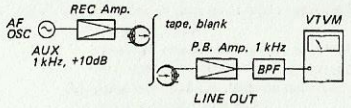

Fig. 12-23 Erase ratio measurement setup

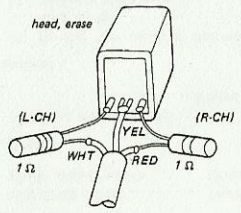

Fig. 12-24 Erasing current check setup

12-17. Overall Frequency Response Measurement

Connection:

As shown in Fig. 12-25.

Switch Setting:

MONITOR switch ..... TAPE

VR Setting:

AUX VOLUME ..... indicated on page 25

Procedures:

(1) Be sure that the trap coil adjustment has been made.
(2) Thread a blank tape.
(3) Deliver a 1 kHz signal of -40 dB (7.75 mV) into the AUX INput jack and record the signal on the blank tape and memorize the VTVM reading.
(4) Deliver 50 Hz, 100 Hz, 5 kHz, 7 kHz, 12.5 kHz and 18 kHz signals in turn and record them on the blank tape and memorize the VTVM readings respectively.
(5) Be sure that each deviation in level against 1 kHz signal is within the values shown in the table below.
If not, perform the record equalizer and the record bias adjustments.

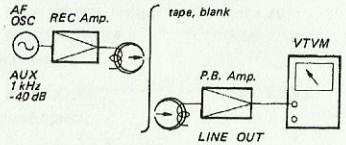

Fig. 12-25 Overall frequency response measurement setup

Deviation against the 1 kHz signal

frequency / tape speed	50 Hz	100 Hz	5 kHz	7 kHz	12.5 kHz	18 kHz
19 cm/s (7½ ips)	± 3 dB	± 3 dB	± 3 dB	± 3 dB	± 3 dB	$^{+3}_{-6}$ dB
9.5 cm/s (3¾ ips)	$^{+3}_{-10}$ dB	± 3 dB	± 3 dB	± 3 dB	$^{+3}_{-12}$ dB	
4.8 cm/s (1⅞ ips)	$^{+3}_{-10}$ dB	± 3 dB	$^{+3}_{-7}$ dB			

12-18. Overall S/N Ratio Measurement

Connection:

As shown in Fig. 12-26.

Switch Setting:

MONITOR switch ..... TAPE

VR Setting:

AUX VOLUME ..... indicated on page 25

Procedures:

(1) Thread a blank tape.
(2) Deliver a 1 kHz signal of -10 dB (0.24 V) into the AUX INput jack and record the signal on the blank tape.
(3) Remove the input connection of the audio generator and terminate the MIC and the AUX INput jacks with the dummy resistors (MIC–600Ω, AUX–10 kΩ).
(4) Rewind the recorded tape and erase a part of the recorded tape (record mode with no signal input).
(5) Be sure that the ratio of the recorded part of the tape to the erased part on the VTVM is more than 45 dB.

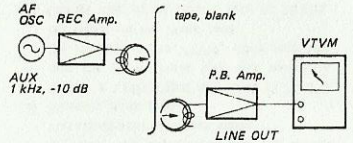

Fig. 12-26 Overall S/N ratio measurement setup

12-19. Distortion Measurement

Connection:

As shown in Fig. 12-27.

Switch Setting:

MONITOR switch ..... TAPE

VR Setting:

AUX VOLUME ..... indicated on page 25

Procedures:

(1) Before measuring the distortion, be sure that the trap coil adjustment has been made.