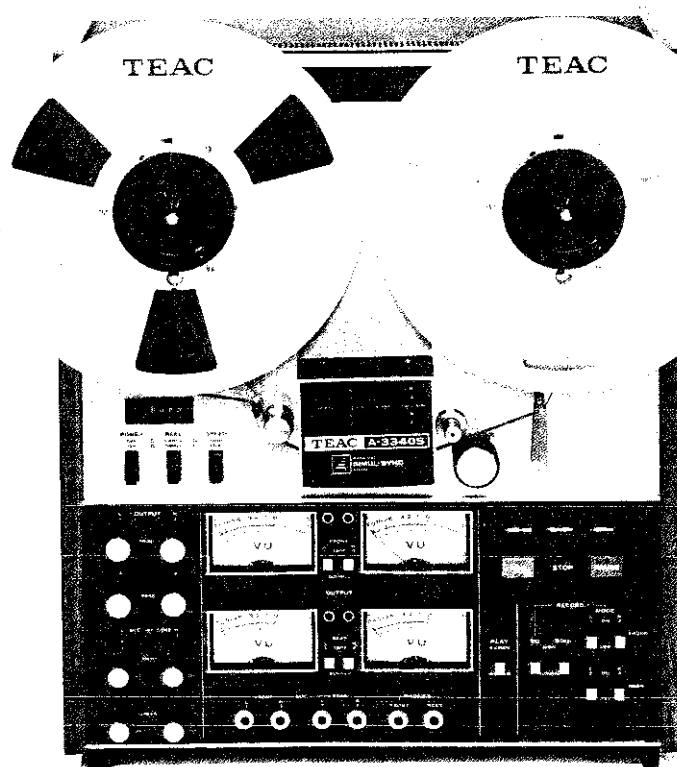


SERVICE MANUAL

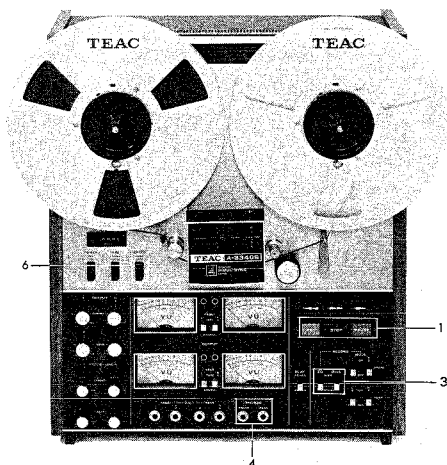
A-3340S 4 CHANNEL STEREO TAPE DECK



TEAC
CORPORATION

FEATURE COMPARISON CHART, A-3340::A-3340S

1. Transport controls	Lever switch and buttons	All pushbuttons incl. PAUSE
2. Remote/Timer adapt.	Not avail.	RC-120 Remote RC-320 Timer adapt.
3. Tape Selector	Single	Separate BIAS and EQ
4. PHONES jacks	Single with F/R/MIX sw.	2 separate, F and R
5. Output level	0.3V (-8 dB)	0.775V (0 dB)
6. TAPE SPEED Sw	Rotating	Pushbutton
7. POWER Sw location	Ampl. sect.	Trans. section



Other minor design changes were also incorporated; for specific differences in parts and circuitry please consult the Parts List and Schematic Diagrams.

1. GENERAL DESCRIPTION

The TEAC A-3340S is a semi-professional tape deck capable of 4 channel, stereophonic and monophonic recording and playback, with Simul-Sync funct. It offers operating speeds of 15 ips and 7-1/2 ips. The basic design of the A-3340 is highly similar to that of the A-3340S, therefore information in this service manual may be applied to the A-3340.

If adjustments or repair procedures are not sufficiently clear or seem too difficult to accomplish, or for more detailed technical information, please contact your nearest TEAC Distributor, TEAC affiliated subsidiary corporation or the TEAC Corporation. TEAC addresses are printed on the last page of this manual.

When placing an order for parts, please refer to the PARTS LIST and PRICE LIST FOR PARTS which are printed separately from this manual.

1. File the PARTS LIST manual together with this SERVICE MANUAL; future MANUAL CHANGE SHEETS should also be kept with these.
2. Use the PARTS LIST manual and the PRICE LIST FOR PARTS when ordering replacement parts from TEAC Corp.

INDEX

1. GENERAL DESCRIPTION	1
2. SPECIFICATIONS	2
3. TOOLS FOR TESTING AND MAINTENANCE	4
4. TEAC TEST TAPE -YTT SERIES-	5
5. TAPE TRANSPORT PARTS LOCATION	6
6. PARTIAL DISASSEMBLY	7
7. LINE VOLTAGE AND FREQUENCY CONVERSION	11
8. HEAD ALIGNMENT	12
9. MEASUREMENT AND ADJ. -MECHANICAL-	14
10. ELECTRICAL ADJUSTMENT LOCATIONS	19
11. MEASUREMENT AND ADJ. -ELECTRICAL-	20
12. SERVICE AND MAINTENANCE	30
13. LIST OF LINE VOLTAGE AND CYCLE(Hz)	32
AROUND THE WORLD	
14. TEAC DECIBEL TABLE CHART	33
15. TROUBLE SHOOTING	34
16. PACKING FOR SHIPMENT	36

2-1. SPECIFICATIONS

MECHANICAL

TYPE:	a) 4 track 4 channel stereophonic b) 4 track 2 channel stereophonic c) 4 track 1 channel monophonic
HEAD:	Erase head × 1, Record head × 1, Playback × 1
REEL SIZE:	10-1/2" maximum NAB reel
TAPE WIDTH:	Standard 1/4 inch tape
TAPE SPEED:	15ips and 7-1/2ips (0.5%)
MOTORS:	6 pole eddy current motors for reel drive × 2 4/8 pole hysteresis synchronous capstan motor × 1
WOW AND FLUTTER:	0.15% at 15ips (RMS) 0.18% at 7-1/2ips (RMS) Wow and flutter measured according to unweighted (RMS) NAB standard using TEAC YTT-2003/2004 flutter free tape. Above value is measured during playback.
FAST WINDING TIME:	Approx. 140 seconds or less with 1800 ft tape
OPERATING POSITION:	Horizontal or vertical
POWER REQUIREMENT:	DM : 100V 50 Hz, 60 Hz TCA: 117V/60 Hz for TEAC CORPORATION OF AMERICA
WEIGHT:	49.5 lbs (22.5kg) net
DIMENSIONS:	

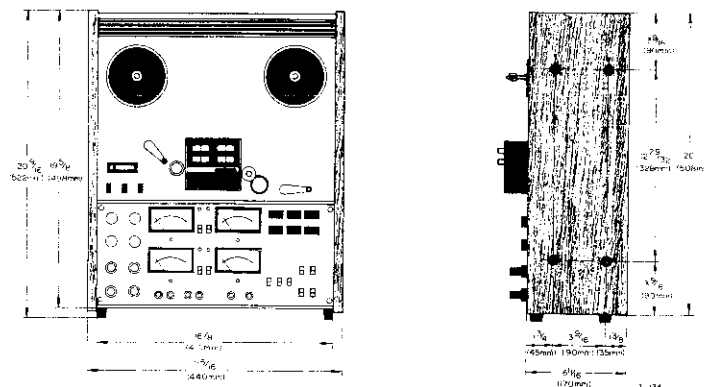


Fig. 2-1 Dimensions A-3340S

2-2. SPECIFICATIONS

ELECTRICAL

FREQUENCY RESPONSE:	Overall from recording INPUT to playback OUTPUT 15ips ... 30 Hz~22 kHz ± 3 dB 7-1/2ips ... 40 Hz~18 kHz ± 3 dB
RESP. at SIMUL-SYNC:	30 Hz~7.5 kHz ± 10 dB with both speed
SIGNAL-TO-NOISE RATIO:	50 dB or higher at Mic input (600 Ω load) 55 dB or higher at Line input (Measured during playback unweighted)
INPUT IMPEDANCE:	MIC: 10k Ω (600 Ω ~10k Ω) LINE: 50k Ω
OUTPUT LOAD IMPEDANCE:	LINE: approx. 0.3V/10k Ω HEADPHONE: 0.3mW/8 Ω
INPUT LEVEL:	MIC: -70 dB ± 2 dB (0.25mV) LINE: - 8 dB min. -18 dB ± 2 dB (97mV)
OUTPUT LEVEL:	OUTPUT: 0 dB (0.775V) max. +6 dB (1.55V) HEADPHONE: -12 dB/8 Ω
BIAS FREQUENCY:	100 kHz (± 5 kHz; Push-pull oscillator)
CROSS TALK REJECTION:	27 dB or more, adjacent track at 125 Hz
CHANNEL SEPARATION:	50 dB or more, channel to channel at 1 kHz
ERASE EFFICIENCY:	68 dB or more at 1 kHz signal

GENERAL NOTICE

- * As a result of continuing changes and improvements during the production run, minor difference may be found between early and later machines.
Refer to manual change sheet for information concerning modifications.

- * Value of "dB" in the test refer to 0 dB = 0.775V, except where specified. If a Test Set or an AC VTVM calibrated to 0 dB = 1V is to be used, appropriate compensation should be made.

Refer to the TEAC DECIBEL TABLE on page 33 to obtain conversion of millivolts to dB should your meter not have a dB scale.

3. TOOLS FOR TESTING AND MAINTENANCE

A minimum of the following tools and test instruments are required for measuring and adjusting to obtain optimum performance. Regular maintenance tools will be adequate for those not listed here. If any test instrument listed here is not available, a close equivalent can be used.

SPRING SCALE 0 4~kg (0~8 lbs), 0~300 g (0~10 ozs)
 FLUTTER METER Meguro Denpa Co., Model MK665B (preferred)
 or Sentinal Co., Model FL-3D-1
 DIGITAL COUNTER Range - 0~Hz~5 kHz
 BANDPASS FILTER TEAC Model M-206A (1 kHz)
 VTVM Hewlett-Packard Co., Model 4302B
 OSCILLOSCOPE General purpose
 BLANK TAPE Scotch 203 and 150, full 7" reels
 TEST TAPE TEAC YTT-1002 (3-3/4ips), YTT-1003 (7-1/2ips),
 YTT-1004 (15ips) for Playback Alignment test
 YTT-2002 (3-3/4ips), YTT-2003 (7-1/2ips),
 YTT-2004 (15ips) for Tape Speed and Flutter test
 EMPTY REEL TEAC RE-702(2" hub) and RE-701(4" hub)
 TEST SET* TEAC M-826A

* Use of the TEAC-M826A Test Set is recommended. This set incorporates an AC VTVM, Audio Oscillator, Channel Selecting switch, Variable Attenuator, Monitor Speaker and Cables.

TEAC M-826A measures the RMS value of the Voltage (0 dB = 0.775V). Characteristics of this Test Set are similar to the standard VU-meter.

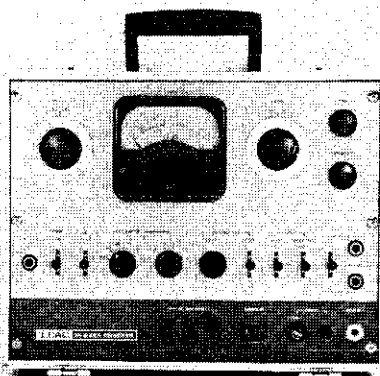


Fig. 3-1 TEAC Test Set

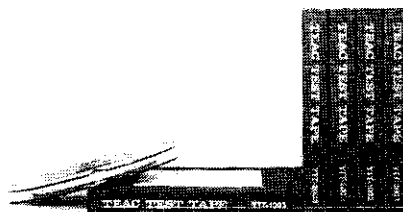


Fig. 3-2 TEAC Test Tape

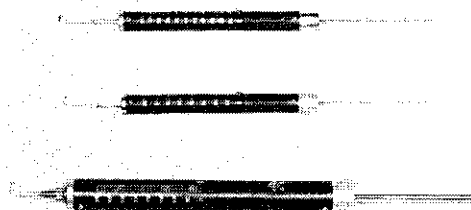


Fig. 3-3 Spring Scale

4. TEAC TEST TAPE -YTT SERIES-

TEAC-YTT Series Test Tapes are designed for aligning and checking the playback system performance of any tape recorder. They have been manufactured to be within close tolerance to the NAB Standard, and the recorded signal format has been arranged for maximum convenience during test procedures.

YTT-1002/1003/1004 (FOR PLAYBACK ALIGNMENT)

TYPE		YTT-1002	YTT-1003	YTT-1004	REMARKS	
TITLE		PLAYBACK ALIGNMENT				
TAPE	WIDTH	1/4 INCH				
	BASE	1 MIL	1 MIL	1-1/2 MIL		
TAPE SPEED(ips)		3-3/4	7-1/2	15	Accuracy: 0.2% Wow and Flutter: 0.1%(WRMS)	
RECORD TRACK		FULL TRACK			Azimuth Angle Tolerance: 90°±1.5'	
RECORDING CHARACTER- ISTICS	STANDARD	NAB				
	TIME CONSTANT (μs)	3180+90	3180+50	3180+50		
	TOLER- ANCE	WITHIN 0.5dB	50-5kHz	40-10kHz		30-15kHz
	WITHIN 1dB	7.5k-10kHz	12k-15kHz	20kHz		

RECORDED SIGNAL	SECTION	FREQUENCY (Hz)			LEVEL	TIME	USE
		YTT-1002	YTT-1003	YTT-1004			
	1	400	400	400	* 0dB	30s	Operating Reference Level Calibration
2	7,500	15,000	15,000	-10dB	60s	Azimuth Alignment	
3	400	400	400		30s	Frequency Response Check	
	10,000	15,000	20,000		15s each		
	7,500	12,000	15,000				
	5,000	10,000	12,000				
	2,500	7,500	10,000				
	1,000	5,000	7,500				
	750	2,500	5,000				
	500	1,000	2,500				
	250	750	1,000				
	100	500	750				
	50	250	500				
		100	250				
		50	100				
		40	50				
		40					
		30					

* 0dB recording level is 6dB below the 3% T.H.D. level

YTT-2002/2003/2004 (FOR TAPE SPEED AND WOW-FLUTTER TESTING)

TYPE		YTT-2002	YTT-2003	YTT-2004	REMARKS
TITLE		TAPE SPEED AND FLUTTER TSET			
TAPE	WIDTH	1/4 INCH			
	BASE	1 MIL	1 MIL	1-1/2 MIL	
TAPE SPEED(ips)		3-3/4	7-1/2	15	Weighted RMS
WOW AND FLUTTER		0.07%	0.05%	0.03%	
RECORDED WIDTH		FULL TRACK			
RECORDED SIGNAL	FREQUENCY	3,000Hz			0dB: Operating Reference Level
	LEVEL	-5dB			
	TIME	7 MINUTES			

Since these tapes will be your own reference standard, care should be exercised, in handling and storage, not to expose them to any magnetic flux which might deteriorate or completely destroy the recorded signals. High temperature and humidity are also harmful to the tape.

5. TAPE TRANSPORT PARTS LOCATION

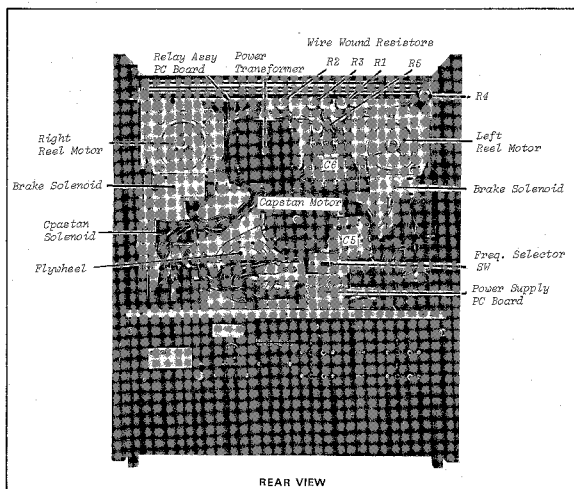


Fig. 5-1 Tape Transport Location

* For ordering parts, refer to the exploded view of the PARTS LIST. An accompanying listing provides the correct part numbers.

6. PARTIAL DISASSEMBLY

REMOVING WOODEN SIDES AND REAR PANEL

See illustration for complete disassembly instructions.

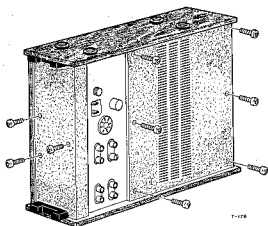


Fig. 6-1 Rear Panel and Bottom Plate

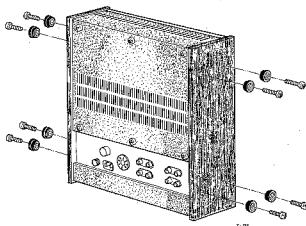


Fig. 6-2 Wood Side

Most amplifier checks and adjustments can be made from the bottom with the plate removed.

These adjustments should be performed by experienced technicians, and then only when going through the complete test and check procedures on the unit which is being tested.

HEAD ASSEMBLY REPLACEMENT

To change the head assembly as a unit, remove the 4 mounting screw. Note the positions of the wires on the circuit board before unsoldering. Solder the wires of the new assembly in exactly the same positions. Refer to the Fig. 8-3 Head Wiring Section.

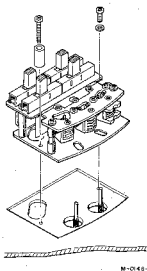


Fig. 6-3 Head Assy Removal

REMOVAL OF CAPSTAN MOTOR

1. Remove the 3 screw holding the capstan motor.
2. Unsolder the 6 wires connecting the capstan motor.
3. Remove the 4 screws holding the capstan motor. Watch for the Rubber Cushions.
4. Loosen the 2 set screws (hex head) in pulley and lift off pulley.

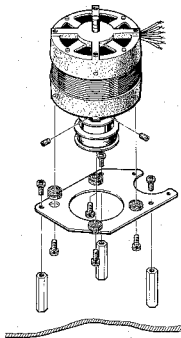


Fig. 6-4 Capstan Motor Removal

REMOVAL OF CAPSTAN ASSEMBLY

1. Unscrew capstan cover (front panel).
2. Remove 2 screws from rear bracket, allow bracket to drop toward floor of case.
3. Remove capstan belt.
4. Loosen 2 screws in capstan assy flywheel. Remove flywheel.
5. Remove 3 screws in capstan assy.
6. Gently move capstan assy up and down until it slides out of panel.

NOTE

A clearance of 0.01" must be maintained between the flywheel and capstan assembly.

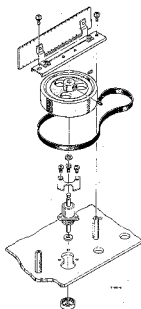


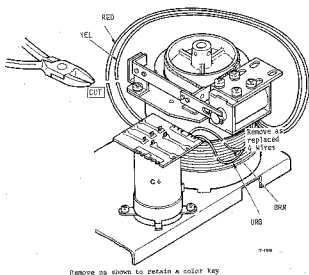
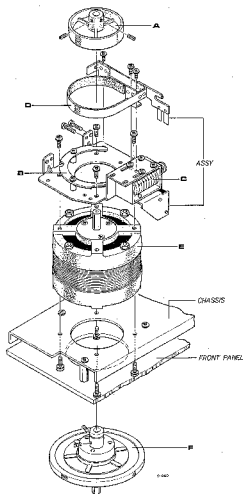
Fig. 6-5 Capstan Assy Removal

REMOVAL OF REEL MOTOR ASSEMBLY

1. Disconnect the 4 motor wires from terminals and release wire harness straps.
2. Loosen 2 set screws (hex head) in Brake drum(A) and 2 in the Reel Turntable assembly(F). Lift off these parts.
3. Remove 4 screws securing the Brake Assembly(D) to the motor. Carefully lift off the Brake Retainer(B) with its 2 wires still connected to the Brake Solenoid(C).
4. Remove 4 screws securing Reel Motor(E) to chassis through the front panel.

NOTE

Reel motor assemblies are mirror images of each other, these assemblies are not interchangeable.



Reel Motor (LEFT)
Replacement Step 1.

Fig. 6-6 Reel Motor Assy Disassembly

REMOVAL OF TENSION ARMS LEFT AND RIGHT

See illustration for complete disassembly instructions.

CAUTION

Do not over-tighten screws holding right tension arm. Insulating spacer and micro-switch are easily broken by excess pressure.

IMPORTANT

After reassembly check clearance to ascertain that arm moves freely and is not binding.

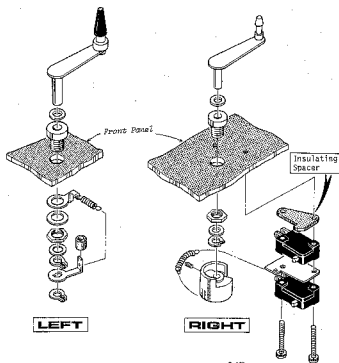


Fig. 6-7 Tension Arms Removal

HEAD REPLACEMENT

To replace a single head, a nut driver is required. Remove the 2 nuts on the defective head through the access hole provided, this releases the head from the mounting plate. Rewire the new heads as shown in Fig. 6-8. Replace the nuts securing the new head to the plate, perform head alignment before operation.

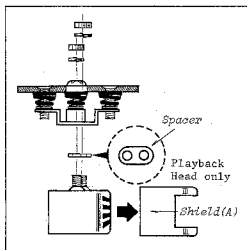


Fig. 6-8 Head Replacement

7.LINE VOLTAGE AND FREQUENCY CONVERSION

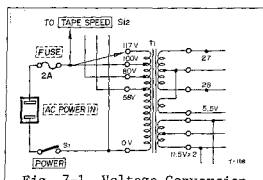
Unit must be set to the power line frequency available. Improper frequency setting will result in a 20% error between the tape speed and reel motors torque.

US model is preset to 117V AC and 60 Hz. No frequency conversion is required.

NOTE: If it should be necessary to convert the A-3340S deck to operate from a power source of different voltage or frequency, it may be easily accomplished as follows:

VOLTAGE CONVERSION:

The A-3340S may be set for 100 or 117 volts only. See illustration Fig. 7-1 (Voltage Conversion) and change wiring as shown.



8. HEAD ALIGNMENT

HEAD ASSEMBLY (head cluster) is adjusted to very close tolerance at the factory and normally requires only minor alignments or adjustments after replacement on the deck. Complete readjustment of the HEAD ASSEMBLY will be necessary when an individual head is replaced.

HEIGHT ADJUSTMENT

- RECORD HEAD: The record head pole should be above the edge of a threaded tape by the width of a thin pencil line.
- PLAYBACK HEAD: The playback head pole should be even with the top of a threaded tape.
- ERASE HEAD: Erase section should be a heavy pencil line above.

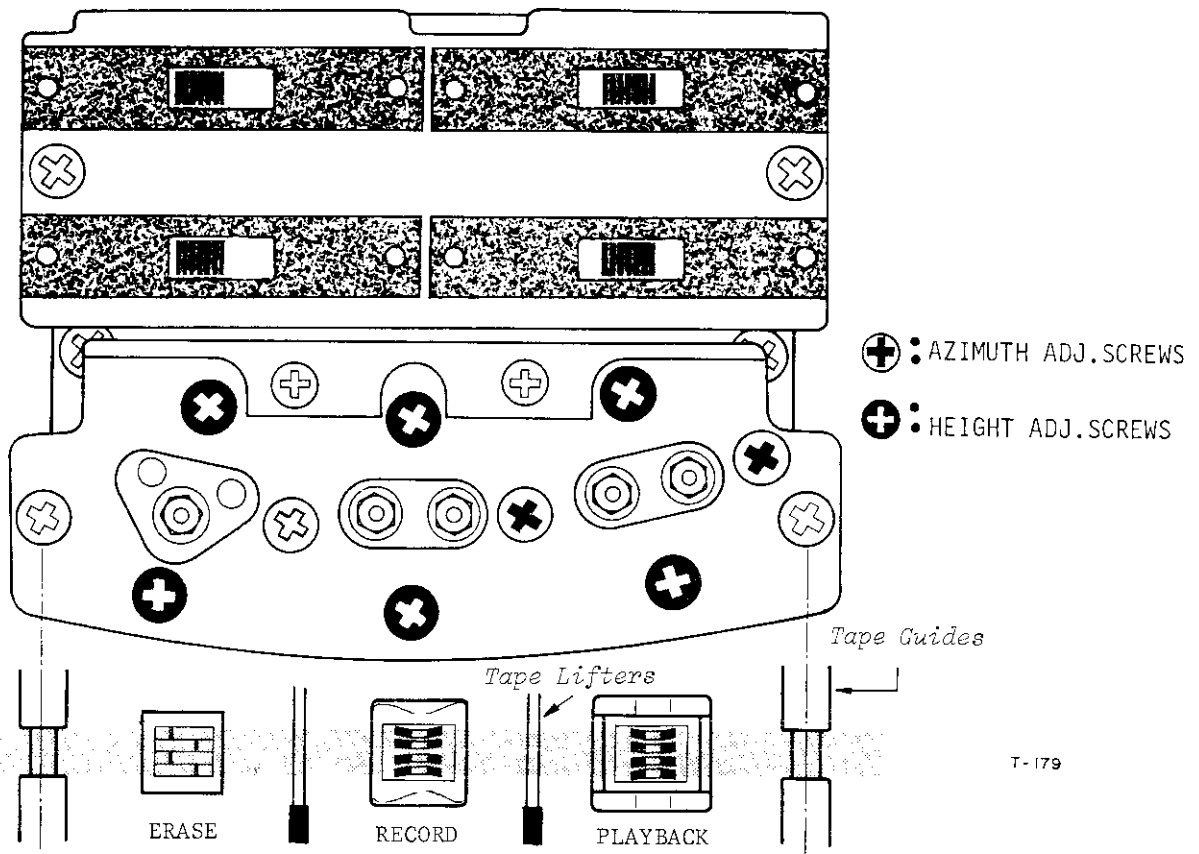


Fig. 8-1 Head Configuration and Alignment Screws

MIS-ALIGNMENT OF THE HEADS -EXAMPLES

- * **ALIGNMENT** - The physical positioning of a tape head relative to the tape itself. Alignment in all respects must conform to rigid requirements in order for a unit to function properly.
- * **AZIMUTH** - The angle of a tape head/pole-piece gap relative to the direction of tape travel.

NOTE: In order for a tape unit to work at its best, with its own tapes as well as ones made on other units, its play and record heads must be aligned to correct the 4 possible errors as illustrated below.

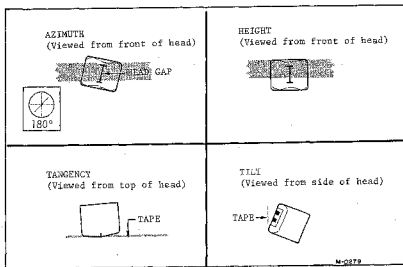


Fig. 8-2 Head Mis-Alignment -Examples-

HEAD WIRING

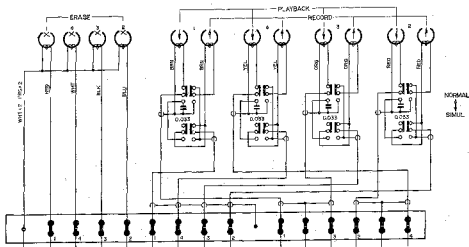


Fig. 8-3 Head Wiring

9. MEASUREMENT AND ADJUSTMENT -MECHANICAL-

The TEAC A-3340S uses a highly reliable 3 motor drive system and should require a minimum of mechanical maintenance or adjustment. These adjustments are made at the factory. Readjustment should only be required after long periods of operation or component replacement.

PINCH ROLLER PRESSURE

NOTE: Pinch roller pressure is supplied by the pinch roller spring arm and it is most important that the solenoid plunger be full bottomed before taking pressure measurement.

1. Load tape or block the shut-off arm in the "ON" position.
2. Attach a suitable spring scale to the pinch roller shaft.
3. Place the unit in the PLAY mode (▶), and holding the spring scale as illustrated, slowly draw it away from the pinch roller.
4. Do not allow the string to rub against the pinch roller.
5. Note the reading on the spring scale at the instant the pinch roller stops rotating.
6. The scale should indicate 2.2~2.5kg. Optimum value is 2.4kg $\pm$ 0.1kg.
7. If adjustment is necessary, loosen the 3 screws on the capstan solenoid and position the solenoid for optimum pressure.
8. Adjust solenoid-limit position so that the gap between capstan shaft and pinch roller is approximately 7mm when solenoid is not actuated. Limit is adjusted by loosening the mounting screw (A), then sliding limit until proper gap is obtained.

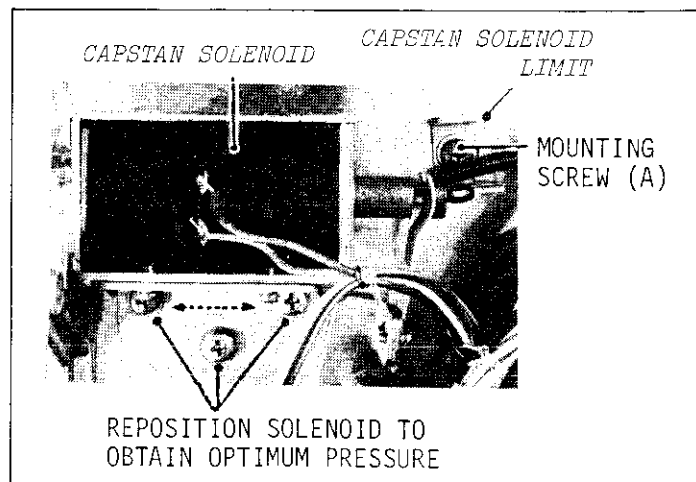
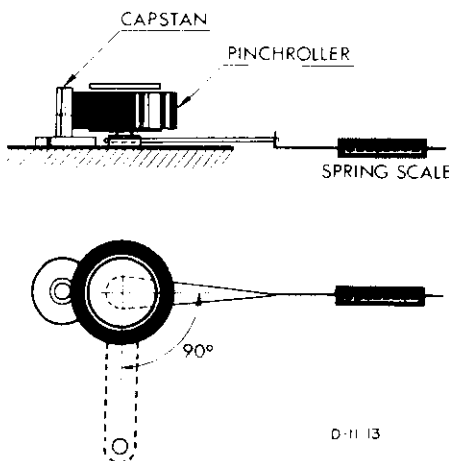


Fig. 9-1 Pressure Measurement and Adjustment Locations

BRAKE TORQUE

The brake torque is actuated mechanically. Pressure is set by the variable spring force. While making these measurements and adjustments, be careful not to bend the brake bands. As brake torque will change with cleaning, brake drums and brake shoes should be cleaned only when absolutely necessary. If cleaning is required, use TEAC cleaner TZ-261B. After cleaning operate the machine for a month of normal operation before performing the procedures below.

Brake adjustments are made with "NO" power connected to the equipment.

1. Place an empty 2" hub reel on the left reel table, and fasten one end of a 30" length of string to the reel anchor.
2. Wind several turns of string counterclockwise around the hub and attach a suitable spring scale to the free end of the string.
3. Take a reading only when the reel is in steady motion since the force required to overcome static friction will produce a false, excessively high initial reading.
4. The reading should be 1000 g-cm $\pm$ 200 g-cm.
5. If adjustment is required, loosen the 2 screws shown and position the brake for optimum torque.
6. The adjustment of the right brake is the same, with the exception that rotations are clockwise.

NOTE: The difference in reading between the right and left brakes should be kept within 100 g-cm.

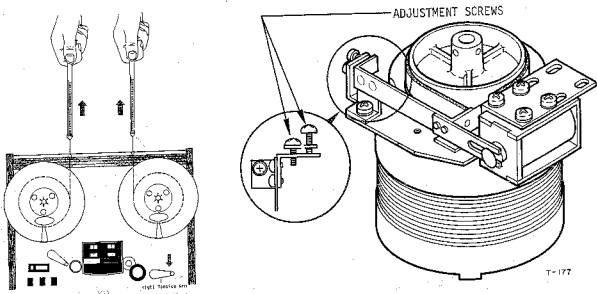


Fig. 9-2 Torque Measurement and Brake Assy Adj. Location

REEL TORQUE ADJUSTMENT LOCATIONS

Back tension and Take-up Torque should be to exact specified Limits given on the next page (TORQUE MEASUREMENT PROCEDURE). If necessary, adjust slider of the resistors until you have the correct scale reading to get optimum torque. Refer to ADJUSTMENT LOCATIONS below.

All Torque and Tension Measurements must be made with the automatic shut-off switch (Right Tension Arm) blocked to the "ON" position.

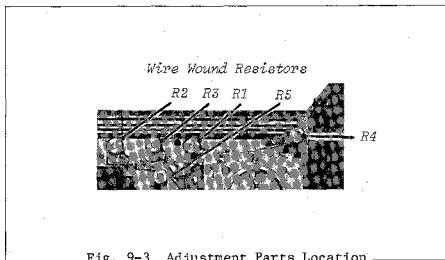


Fig. 9-3 Adjustment Parts Location

ADJUST

- R2 ... BACK TENSION ——— LARGE
- R3 ... BACK TENSION ——— SMALL
- R1 ... TAKE-UP TORQUE ——— LARGE, SMALL
- R4 ... BACK TENSION FOR FAST FORWARD

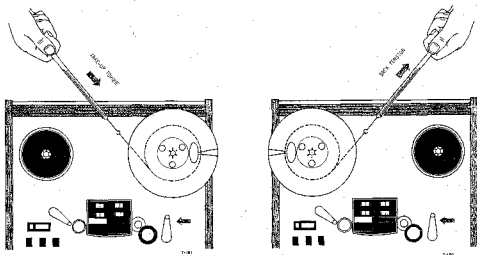


Fig. 9-4 Torque Measurement

TORQUE MEASUREMENT PROCEDURE

BACK TENSION

1. Load tape or block the shut-off arm in the ON position.
2. Place an empty 7" reel with a 2" diameter hub on the left reel table.
3. Rotate the reel and wind several turns of string around the hub. Attach spring scale to string.
4. Place the unit in the (▶) play mode.
5. Pull the scale away from the reel against the motor torque, with a steady smooth motion.
6. Note the scale reading while it is in steady motion.
7. Make sure the string does not rub against the reel flanges.
8. The reading should be approximately:

REEL SW	BACK TENSION
LARGE	300~320 g-cm
SMALL	180~210 g-cm

TAKE-UP TORQUE

1. Place the empty reel and attached spring scale on the right reel table.
2. Place the unit in the (▶) play mode.
3. Allow the rotation of the reel to slowly draw the scale toward the hub.
4. Hold the spring scale with enough force to allow a steady reading.
5. It should be approximately:

REEL SW	TAKE-UP TORQUE
LARGE	780~820 g-cm
SMALL	380~400 g-cm

REWIND BACK TENSION

1. Load a full 1,800 ft reel of tape (7-1/2") on the right reel table.
2. Place an empty reel with 2" rub on the left reel table.
3. Place the unit in the fast rewind mode.
4. At this time observe the right tension arm.
The arm should move approximately 1" to the right and remain there.
5. Check value of R4 (1.2k) if movement is extremely incorrect.

REEL HEIGHT ADJUSTMENT

Reel height adjustment is required only if a motor has been replaced or if tape rubs excessively against the reel flange. Adjustment is accomplished by the set screws as shown in the illustration below. Reel turntable should be adjusted using standard 7" reels. With a tape threaded on the machine, position the reel-height for smooth tape travel.

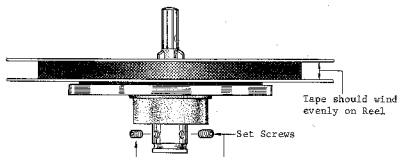


Fig. 9-5 Reel Height Adjustment

FLUTTER

Flutter should be measured in playback mode using a TEAC flutter free tape YTT-2004 (15ips), 2003 (7-1/2ips) and Meguro model MK665B flutter meter. Measurement of flutter should be made in accordance with NAB standards. Values obtained with different standards or equipment cannot be compared.

Flutter should not exceed, 15 ips : 0.15% (RMS)
 7-1/2 ips: 0.18% (RMS)

These figures apply to any tape position and direction (such as full take-up reel, full supply reel or about mid point).

If there is excessive wow and flutter, examine the pinch roller, belt, motors, capstan shaft, and reel rest for "grease", "oil", "dirt" and/or "wear". Also examine the tape counter assy for evenness of operation.

TAPE SPEED

The tape speed should be measured using TEAC flutter free tape, Model YTT-2003 (7-1/2ips), YTT-2004 (15 ips). These tapes contain a highly accurate 3 kHz tone. Connect a digital frequency counter to either line OUTPUT jack. The indicated frequency should be 3000 Hz (± 30 Hz or less) for both speeds.

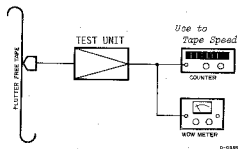
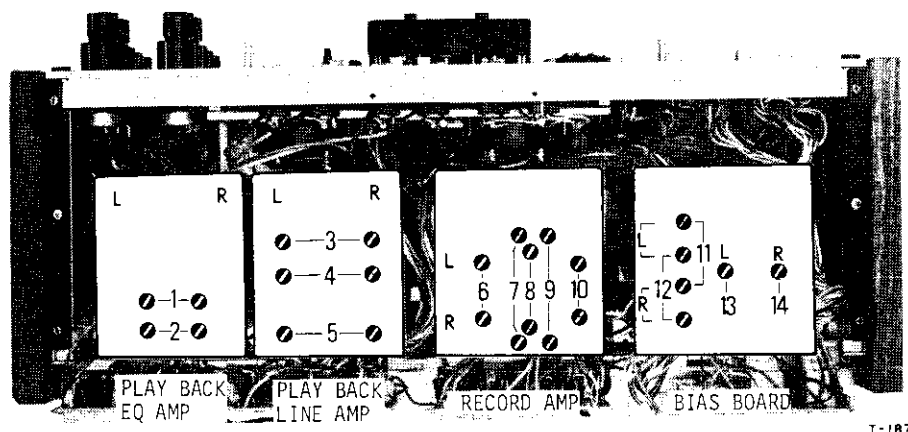


Fig. 9-6 Test Equipment Set-up

10. ELECTRICAL ADJUSTMENT GENERAL NOTICE

- * Outlined procedures refer only to FRONT channels, the same procedures also apply to REAR channels.
- * Before performing checks set all head function selector switches to NORMAL position.
- * Place OUTPUT switches (L1-R3, L2-R4) in TAPE position, place Tape SPEED control at HIGH, place PLAY switch in 4 CHAN position.
- * Procedures for checks and adjustments, unless otherwise indicated, are for the left channel at a tape speed of 15 ips. The same procedures are to be applied to the other channels and again for both channels at 7-1/2 ips.
All controls mentioned in this book will be printed in bold letters and will be exactly as they appear on the unit.
- * Double designated symbol numbers refer to left channel/right channel.
- * Only FRONT adjustments are illustrated, REAR adjustments are identical.

ADJUSTMENT LOCATIONS

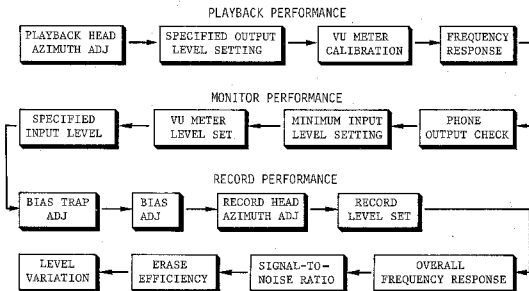


	FOR	ADJUSTMENT			FOR	ADJUSTMENT	
		LEFT	RIGHT			LEFT	RIGHT
1.	P.B EQ HIGH SPEED	VR101	VR103	8.	REC METER LEVEL	VR302	VR305
2.	P.B EQ LOW SPEED	VR102	VR104	9.	RECORD EQ	L301	L303
3.	BIAS TRAP	L201	L202	10.	BIAS TRAP	L302	L304
4.	P.B LEVEL	VR201	VR203	11.	BIAS HIGH ADJ	VC501	VC503
5.	P.B METER LEVEL	VR202	VR204	12.	BIAS NORMAL ADJ	VC502	VC504
6.	RECORD LEVEL	VR303	VR306	13.	DUMMY COIL	L401	
7.	MONITOR LEVEL	VR301	VR304	14.	DUMMY COIL		L402

Fig. 10-1 Adjustment Locations

11. MEASUREMENT AND ADJUSTMENT -ELECTRICAL-

ADJUSTMENT SEQUENCE



PLAYBACK HEAD AZIMUTH ADJUSTMENT

NOTE: After head replacement or if, during playback, a slight pressure on the heads results in a rise of the reading of the Test Set (M-826A), head azimuth should be readjusted.

Coarse Adjustment:

1. Connect a Test Set to either OUTPUT jack.
2. Thread a TEAC Test Tape YTT-1003 on the unit.
3. Play the 15 kHz Test Tone in Section 2 of the Test Tape.
4. Slowly rotate the azimuth screw until maximum indication is obtained on the Test Set. Then decrease reading 0.5 dB by rotating screw clockwise.

Fine Adjustment:

NOTE: It is absolutely essential to accomplish the coarse adjustment before performing the fine adjustment to avoid phase errors larger than 45°. After coarse adjustment, do not make large corrections, turn azimuth screw 1/4 turn or less.

5. Connect the test equipment as shown in Fig. 11-1.
6. Play a 50 Hz-10 kHz signal and adjust the azimuth screw until the oscilloscope shows that the signals are less than 45° out of phase.
7. Secure the screw with a drop of LOCTITE.

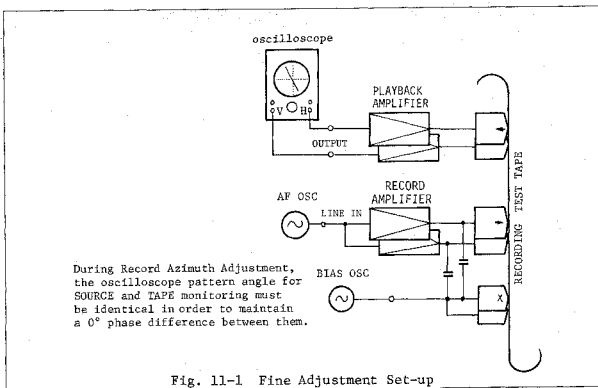
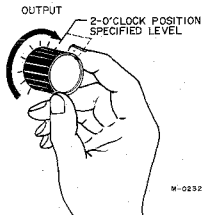


Fig. 11-1 Fine Adjustment Set-up
-Head Alignment-

Connect a 10k Ω load to the OUTPUT jacks for all audio measurement when not using TEAC Test Set (M-826A).

IMPORTANT



VU METER CALIBRATION

1. Play the 400 Hz tone (1% THD) in Section 1 of the Test Tape.
2. With OUTPUT switches FRONT and REAR in the TAPE position, adjust VR-202/204 for a reading of 0 VU on the VU meters.

FREQUENCY RESPONSE

1. Set Tape SPEED to HIGH position. Using Test Tape YTT-1004, play the Test Tones from 15 kHz down to 40 Hz (recorded at 10 dB below operating reference level).
2. Compare the readings obtained on the Test Set with the response limits given in Fig. 11-2.
3. In case of any deviation in the response curve, check head azimuth alignment, clean the heads, then adjust VR-101/103 for the best response.
4. Set Tape SPEED to LOW, using Test Tape YTT-1003. Repeat Frequency Response check at LOW speed. If required, adjust VR-102/104 as in HIGH position.

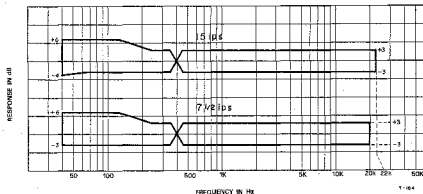
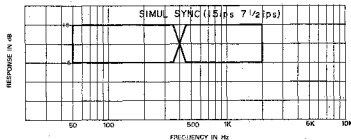


Fig. 11-2 Frequency Response Limits -Playback-

SIMUL SYNC FREQUENCY RESPONSE

15 ips and 7-1/2 ips response should be identical. Frequency response in SIMUL-SYNC function is measured as in normal operation.



PHONES OUTPUT CHECK

1. Place OUTPUT controls at the Specified Level Setting (400 Hz signal at 0 dB).
2. Connect an 8Ω non-inductive resistor across the headphone output. Connect Test Set across the resistor.
3. Test Set should indicate -16 dB $\pm$ 2 dB.

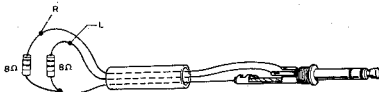


Fig. 11-3 Headphone Connecting Resistor

MINIMUM INPUT LEVEL SETTING

LINE Input:

With OUTPUT controls at specified output level (0 dB 0.775V)

1. Connect an AF oscillator to the LINE IN jacks.
2. Apply a 400 Hz signal at -18 dB.
3. Place the OUTPUT switches FRONT and REAR in the SOURCE position and turn the LINE controls fully clockwise.
4. Adjust VR-301/304 to obtain a specified output level of 0 dB at OUTPUT jacks.

MIC Input:

5. After adjusting VR301/304, apply a 400 Hz signal at -70 dB to the MIC IN jacks.
6. Rotate the MIC controls fully clockwise.
7. The output should be 0 dB (specified output level).

NOTE: Return MIC controls fully clockwise (CCW) to prevent noise insertion during the following steps.

SPECIFIED INPUT LEVEL SET

8. Apply a 400 Hz signal at -18 dB to the LINE IN jacks.
9. Adjust the LINE controls for 0 dB at the OUTPUT jacks.

NOTE

Do not disturb the specified input level position of these controls until the remaining checks and adjustments are completed. The difference between the channels must not exceed $\pm$ 2 dB as indicated on the Test Set. If they are not within limits, check the amplifier gain and the LINE control settings.

VU METER CALIBRATION —RECORD—

10. With the same 400 Hz signal at -18 dB applied and the OUTPUT switches FRONT and REAR in SOURCE adjust VR-302/305 for 0 VU on the VU meters.

Before making any adjustments on the record amplifier, be sure that all tests in the HEAD ALIGNMENT, PLAYBACK and MONITOR PERFORMANCE sections have been accomplished and that all level adjustments are correct.

Optimum recording performance is dependent upon tape characteristics. The TEAC A-3340S is factory set with SCOTCH type 203 for HIGH Bias and 150 type for NORMAL Bias tapes.

BIAS TRAP ADJUSTMENT

The bias trap tank circuit keeps the bias signal from reaching the record and monitor amplifier and under normal "no signal" conditions, voltage should not be present at the OUTPUT jacks.

1. Place BIAS/EQ switch in the HIGH position, OUTPUT switch in TAPE position and all RECORD MODE switches ON. Place tape mode lever at PAUSE position. Depress RECORD and (▶) buttons.
2. Connect a VTVM to the junction of L-302/C-312 (Left channel), L-304/C-330 (Right channel).
3. Adjust L-302, L-304 for minimum reading.

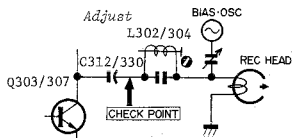


Fig. 11-4 Bias Trap Check Point

BIAS ADJUSTMENT

Adjust BIAS trap (L-302/304) before adjusting BIAS levels.
These adjustments are only made at 7-1/2 ips tape speed.
The bias oscillator frequency is 100 $\pm$ 5 kHz.

HIGH Position

1. Thread a record test tape (Scotch 203) on the unit. Place BIAS/EQ switch in HIGH position.
2. Place OUTPUT switches in TAPE position, PAUSE switch at PLAY.
3. Apply a 400 Hz signal at -8 dB at the LINE IN jacks.
4. Adjust VC-501/503 for a peak on the Test Set.
5. Turn the capacitors clockwise until a decrease of 0.5 dB is obtained.

NORMAL Position

1. Thread a record test tape (Scotch 150) on the unit. Place BIAS/EQ switch to NORMAL position.
2. Adjust VC-502/504 as in HIGH position.

RECORD HEAD AZIMUTH ADJUSTMENT

Coarse Adjustment:

NOTE: The effect of turning the azimuth screw will not immediately register on the Test Set. A slight delay will be noticed. Therefore, the screw must be rotated slightly with a pause to see the effect.

1. Connect a Test Set to the OUTPUT jack and an AF oscillator to the LINE IN jack, then set the AF oscillator to 10 kHz.
2. Make certain that the LINE controls are at the Specified Input Level positions.
3. Place the MONITOR switch to SOURCE and adjust the AF oscillator to obtain a signal of 20 dB below the Specified Output Level.
4. Thread a record Test Tape on the unit.
5. Place the MONITOR switch in the TAPE position.
6. While recording adjust the azimuth screw for maximum indication on the Test Set.

Proceed to the next page "Fine Adjustment"

Fine Adjustment:

NOTE: It is absolutely essential to accomplish the coarse adjustment before performing the fine adjustment to avoid phase error larger than 45°.

7. Connect the test equipment as shown in Fig. 11-1.
8. Apply a 7.5 kHz signal at -28 dB to the LINE IN jacks and record this signal.
9. Carefully adjust the azimuth screw until the oscilloscope shows the signal to be in phase.
10. Secure the screw with a drop of LOCTITE.

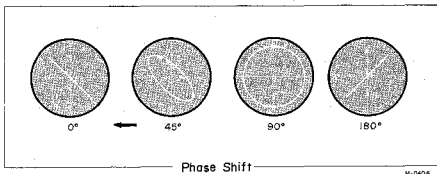


Fig. 11-5 Phase shift

Refer to Fig. 11-1 Fine Adjustment Set-up (playback)

RECORD LEVEL SET

1. Using Scotch 203 tape, BIAS/EQ switch at HIGH position. Apply a 400 Hz signal at -8 dB at the LINE IN jacks.
2. OUTPUT controls must be at specified output level position (0 dB at OUTPUT jacks), and the LINE controls at the Specified Input Level Setting.
3. Place unit in record mode, OUTPUT switches in the TAPE position.
4. Adjust VR-303/306 for a reading of 0 VU on the VU meters. (0 dB at the OUTPUT jacks).

OVERALL FREQUENCY RESPONSE

IMPORTANT

To avoid saturation of the tape these checks should be made at least 20 dB below the specified input level. Any bias signal feeding into the test equipment should be filtered out by adjusting the external bias trap. A broad band VTVM may be used at the output for this adjustment.

HIGH position, BIAS and EQ switches

1. Thread the unit with a record Test Tape (Scotch 203). Set Tape SPEED selector to HIGH position.
2. Adjust the AF oscillator to obtain an output level of -23 dB at OUTPUT jacks.
3. Apply a signal swept from 50 Hz to 18 kHz to the unit while recording on the test tape. With OUTPUT switch at TAPE position monitor the output at the Test Set. See fig. 7-9 for proper response limits.
4. Repeat the above procedures for L (3-3/4 ips), using a signal swept from 50 Hz to 15 kHz.
5. If response is not uniform the heads should be checked for accumulated dirt or tape oxide. If heads are clean, the equalization coils L-301 and L-303 should be adjusted (both speeds).

NORMAL position, BIAS and EQ switches

1. Thread the unit with a record Test Tape (Scotch 150).
2. Repeat the overall response check at both tape speeds. The record equalization should give the proper frequency response.
3. If further adjustment is required, adjust VC-502/504 for best response.

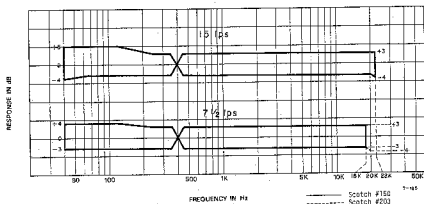


Fig. 11-6 Frequency Response Limits
-Record-

ERASE EFFICIENCY

NOTE: To measure erase efficiency, a 1 kHz band pass filter (TEAC M-206A filter) must be used.

Due to the high level of this signal, it is recommended that only a short recording be made (approximately 30 seconds) to prevent damage to the VU meter.

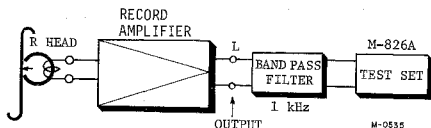


Fig. 11-7 Erase Efficiency Check Set-up

1. Apply a 1 kHz signal at 0 dB to the LINE IN jacks.
2. Place the unit in record mode and record this signal.
3. Rewind the recording to the beginning and remove the AF oscillator from the LINE IN jacks.
4. Place the unit in record mode and record over this portion of tape again.
5. Rewind the tape to the starting point and connect a Test Set (M-826A) to the LINE OUT jack through the 1 kHz band pass filter.
6. Play the erased portion of the tape.
7. The Test Set should indicate -68 dB or less.

LEVEL VARIATION

1. Thread a blank reel of High Output (SCOTCH 203), and select 15 ips. Set the BIAS and EQ switches to HIGH.
2. Record a variety of frequencies, such as 400 Hz, 2 kHz, 5 kHz, 8 kHz, 10 kHz, etc., at the specified input setting. Record approximately 30 seconds at each frequency.
3. During playback, the output level should not vary more than 0.5 dB at 400 Hz, 2 dB at 22 kHz.
4. Repeat steps 2 and 3 with the deck at 7-1/2 ips. The tolerances are the same.

SIGNAL-TO-NOISE RATIO

PLAYBACK

IMPORTANT

OUTPUT controls should be at the Specified Output Level Settings. The signal-to-noise ratio must meet factory standards. The values given are obtained using an unweighted Test Set (M-826A), with the supply and take-up motors having voltage applied but not rotating. The values are with reference to a 3% THD peak recording level.

1. Thread a blank SCOTCH 203 tape on the unit leaving the tape outside the capstan and pinch roller.
2. Place the unit in the PLAY mode (▶) (the tape will not move using PAUSE).
3. The Test Set connected to the OUTPUT jacks should indicate -50 dB or less. This represents a signal-to-noise ratio of 50 dB (1% THD). Residual tape noise is below this at 54 dB.
4. For a 3% THD signal-to-noise ratio, -6 dB is added (3% THD is 6 dB above 1% THD level), giving 54 dB, or the residual noise level of the tape. (See the chart to the right.)

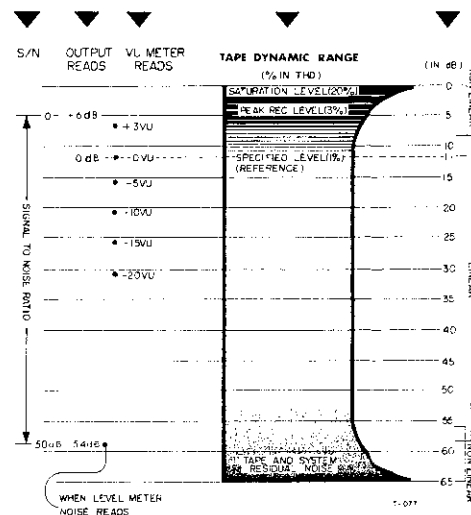


Fig. 11-8 Signal/Noise Computation

OVERALL

IMPORTANT: Clean and demagnetize the heads before proceeding. It is extremely important that all tests described in the preceding paragraphs have been completed and that all controls are left at their specified settings.

1. Thread a blank Test Tape SCOTCH 203 on the unit.
2. Remove the AF oscillator from the LINE IN jacks.
3. Place the unit in the RECORD mode with "no signal" applied. Note the point on the index counter where recording begins.
4. Rewind the tape to the beginning point and play it back.
5. The noise level as indicated on the Test Set should be -55 dB or less.

NOTE: Bias, erase and playback amplifier noise are all included in this measurement. All frequencies between 40 Hz and 15 kHz are measured unweighted.

12. SERVICING AND MAINTENANCE

1. Power supply:

Make sure that the power supply is stable at the rated voltage. Fluctuations will result in uneven tape speed, and wow and flutter in the recorded signal.

2. Cleaning:

TEAC TZ-261A for Head cleaning, TZ-261B for Rubber cleaning should be used.

3. Demagnetization of the head:

If the record or playback head become magnetized, noise will increase and fidelity will deteriorate. For this reason, it is advisable to use brass or other such non-magnetic tools when working near the heads.

Similarly, the use of a tester or vacuum tube ohm-meter should be avoided in checking the heads, as these instruments operate by applying a DC current, and will thus induce magnetism. If the heads have had any contact with DC currents or magnetic tools, demagnetize them with a TEAC Model E-1 Head Demagnetizer.

4. Lubrication:

Under normal operating conditions, lubrication is required only once each year. Before lubricating, clean the drive belt and drive pulleys. Operate the deck for 30 minutes to 1 hour immediately prior to oiling. After oiling, keep the deck in the upright position for 3 to 4 hours to allow thorough absorption of the oil.

Approximately once each year or after 2000 hours of use, apply TEAC TZ-255 Lubricating Oil to the following places only;

Pinch roller shaft bearings 1 drop

Capstan motor shaft bearings ... 2 drops

* Remove the dust cap and washer for access to the felt

Both reel motors ... 0.3 cc maximum to each oiling tube

Capstan motor 0.5 cc maximum to each oiling tube

NOTE: Apply 3 or 4 drops at a time through the oiling tubes. The oil level can be seen to drop as the felt material in the motor bearings absorb oil. When the level ceases to drop, no more oil is needed. Do not attempt to force oil into the motors nor exceed the maximum.

WARNING: Excessive oiling will scatter oil inside the deck. This oil will cause drive belt slippage and other difficulties. Check for slippage and clean all parts inside the deck before operating after lubrication. Check for oil emission after operation before returning deck to the customer.

TEAC MAINTENANCE EQUIPMENT

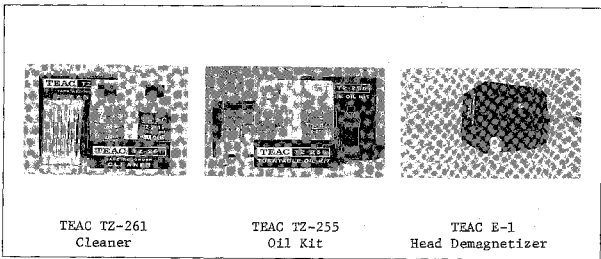


Fig. 12-1 TEAC Maintenance Equipment

LUBRICATION

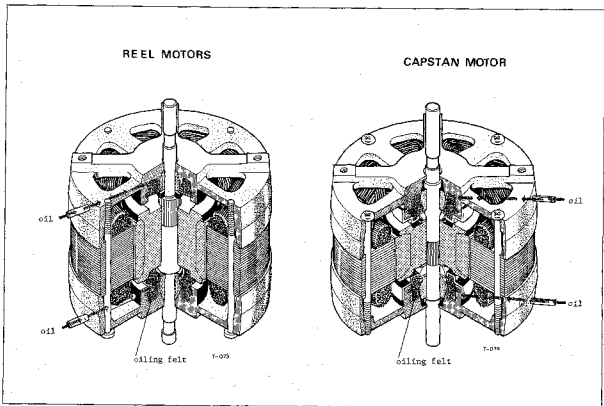


Fig. 12-2 Motor Construction and Oiling points

13. LIST OF LINE VOLTAGE AND CYCLE (Hz) USED AROUND THE WORLD

Name of the country	Cycle (Hz)	Voltage	Name of the country	Cycle (Hz)	Voltage	Name of the country	Cycle (Hz)	Voltage
Argentina	50	220	Guatemala	60	120, (220)	New Zealand	50	230
Algeria	50	127, 220	Germany	50	110, 120, 127, 220	Norway	50	220
Austria	50	230, 240	Hungary	50	220	Okinaua	60	100
Australia	50	220	Honduras	60	110	Pakistan	50	220, 230
Brazil	50/60	110, 115, 121, 227,	Haiti	(50)/60	110, (220)	Paraguay	60	110, (115), (120)
Belgium	50	220	Iran	50	220	Philippines	60	110, (115), (120)
Burma	50	110, 127, 220	Iraq	50	220	Portugal	50	110, (115), (120)
Canada	60	230	Israel	50	230	Poland	50	220
Chile	60	110, 115, 120	Indonesia	50	110, 117	Romania	50	110, 220
Cuba	60	110	Italy	50	230	Rep. of Vietnam	50	120, 127
Costa Rica	60	120	Jamaica	50	110, (120), (127)	Russia	50	(110), 220
Colombia	60	110, (115), (120)	Japan	50/60	(150), (160), 220	Saudi Arabia	50/60	120, 230
Czechoslovakia	50/60	(110), 220	Korea	60	100	Sierra Leone	50	230
Dominica	50	220	Lebanon	50	240	Sri Lanka	50	115, 200
England	50	240, (200), (210), (230),	Luxembourg	50	110, 220	Sweden	50	220
Ecuador	60	(110), 120, 127	Malaya	50	230	Spain	50	(117), 220
El Salvador	60	110	Mexico	50/60	120, 127	Sri Lanka	50	110, 127
Egypt	50	110, 220	Monaco	50	230	Switzerland	50	220
France	50	220	Netherlands	50	115, 127, 220	Taiwan	60	110, 115, 220
Germany	50	220	Nicaragua	50	125, 127, 150, 220	Thailand	50	220
Ghana	50	110, (115), (120),	Norway	50	230	Turkey	50	110, 115, 220
Greece	50	(127), 220	Nicaragua	60	120	U.S.A.	60	115, 120
Haiti	50	220	Nicaragua	60	120	Uruguay	50	220
Honduras	60	110	Nicaragua	60	120	Venezuela	(50)/60	120
Hungary	50	220	Nicaragua	60	120	Yugoslavia	50	220

14. TEAC DECIBEL TABLE

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Relationship between decibels, currents, voltage and power ratios.

Relationship between the 16th and 20th																			
Desired (Volts)	Desired (Power)	Desired (Volts)	Desired (Power)	Desired (Volts)	Desired (Power)	Desired (Volts)	Desired (Power)	Desired (Volts)	Desired (Power)	Desired (Volts)	Desired (Power)	Desired (Volts)	Desired (Power)	Desired (Volts)	Desired (Power)				
Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain				
0	1.0000	1.0000	0	4.0	.9310	1.055	2.00	8.0	.9881	1.2512	4.00	12.0	.9512	1.3997	6.00	16.0	1.585	1.8310	8.00
1	.9810	1.012	1.0	5.0	.9058	1.092	2.50	9.0	.9623	1.2441	4.50	13.0	.9343	1.4007	6.50	17.0	1.567	1.7883	8.50
2	.9772	1.023	2.0	6.0	.8862	1.053	3.00	10.0	.9390	1.250	5.00	14.0	.9245	1.404	7.00	18.0	1.549	1.6750	9.00
3	.9661	1.035	3.0	7.0	.8695	1.041	3.50	11.0	.9246	1.2600	5.50	15.0	.9247	1.411	7.50	19.0	1.531	1.631	9.50
4	.9512	1.047	4.0	8.0	.8560	1.060	4.00	12.0	.9140	1.269	6.00	16.0	.9140	1.419	8.00	20.0	1.513	1.587	10.00
5	.9441	1.058	5.0	9.0	.8397	1.079	25	13.0	.9058	1.261	25	17.0	.9058	1.421	85	21.0	1.496	1.603	25
6	.9333	1.072	6.0	10.0	.8288	1.085	30	14.0	.8915	1.262	30	18.0	.8915	1.426	90	22.0	1.479	1.591	30
7	.9259	1.084	7.0	11.0	.8153	1.118	35	15.0	.8827	1.273	35	19.0	.8827	1.431	95	23.0	1.462	1.578	35
8	.9200	1.095	8.0	12.0	.8054	1.138	40	16.0	.8637	1.254	40	20.0	.8637	1.426	100	24.0	1.445	1.570	40
9	.9016	1.109	9.0	13.0	.7879	1.158	45	17.0	.8589	1.286	45	21.0	.8589	1.467	105	25.0	1.429	1.590	45
1.0	.8913	1.122	10.0	14.0	.7693	1.178	50	18.0	.8341	1.287	50	22.0	.8341	1.466	110	26.0	1.418	1.670	50
11	.8810	1.135	11.0	15.0	.7537	1.198	55	19.0	.8211	1.298	55	23.0	.8211	1.467	115	27.0	1.401	1.651	55
12	.8710	1.148	12.0	16.0	.7405	1.218	60	20.0	.8107	1.311	60	24.0	.8107	1.471	120	28.0	1.383	1.632	60
13	.8619	1.161	13.0	17.0	.7283	1.241	65	21.0	.8019	1.327	65	25.0	.8019	1.474	125	29.0	1.365	1.613	65
14	.8517	1.175	14.0	18.0	.7182	1.262	70	22.0	.7945	1.345	70	26.0	.7945	1.477	130	30.0	1.349	1.594	70
15	.8418	1.189	15.0	19.0	.7088	1.284	75	23.0	.7859	1.365	75	27.0	.7859	1.473	135	31.0	1.332	1.575	75
16	.8314	1.202	16.0	20.0	.6994	1.305	80	24.0	.7769	1.386	80	28.0	.7769	1.468	140	32.0	1.315	1.556	80
17	.8208	1.216	17.0	21.0	.6901	1.326	85	25.0	.7677	1.407	85	29.0	.7677	1.463	145	33.0	1.298	1.537	85
18	.8108	1.230	18.0	22.0	.6808	1.347	90	26.0	.7584	1.428	90	30.0	.7584	1.458	150	34.0	1.281	1.518	90
19	.8010	1.244	19.0	23.0	.6716	1.367	95	27.0	.7492	1.448	95	31.0	.7492	1.448	155	35.0	1.264	1.499	95
20	.7915	1.258	20.0	24.0	.6625	1.387	100	28.0	.7401	1.468	100	32.0	.7401	1.438	160	36.0	1.247	1.480	100
21	.7822	1.272	21.0	25.0	.6535	1.407	105	29.0	.7311	1.487	105	33.0	.7311	1.428	165	37.0	1.230	1.461	105
22	.7731	1.286	22.0	26.0	.6446	1.427	110	30.0	.7222	1.507	110	34.0	.7222	1.418	170	38.0	1.213	1.442	110
23	.7641	1.300	23.0	27.0	.6358	1.446	115	31.0	.7134	1.526	115	35.0	.7134	1.408	175	39.0	1.196	1.423	115
24	.7552	1.314	24.0	28.0	.6271	1.465	120	32.0	.7047	1.545	120	36.0	.7047	1.398	180	40.0	1.179	1.404	120
25	.7464	1.328	25.0	29.0	.6185	1.484	125	33.0	.6961	1.564	125	37.0	.6961	1.388	185	41.0	1.162	1.385	125
26	.7377	1.342	26.0	30.0	.6100	1.503	130	34.0	.6876	1.583	130	38.0	.6876	1.378	190	42.0	1.145	1.366	130
27	.7291	1.356	27.0	31.0	.6016	1.522	135	35.0	.6792	1.602	135	39.0	.6792	1.368	195	43.0	1.128	1.347	135
28	.7206	1.370	28.0	32.0	.5933	1.541	140	36.0	.6709	1.621	140	40.0	.6709	1.358	200	44.0	1.111	1.328	140
29	.7122	1.384	29.0	33.0	.5851	1.560	145	37.0	.6627	1.640	145	41.0	.6627	1.348	205	45.0	1.094	1.309	145
30	.7039	1.398	30.0	34.0	.5770	1.579	150	38.0	.6546	1.659	150	42.0	.6546	1.338	210	46.0	1.077	1.290	150
31	.6957	1.412	31.0	35.0	.5690	1.598	155	39.0	.6466	1.678	155	43.0	.6466	1.328	215	47.0	1.060	1.271	155
32	.6876	1.426	32.0	36.0	.5611	1.617	160	40.0	.6387	1.696	160	44.0	.6387	1.318	220	48.0	1.043	1.252	160
33	.6796	1.440	33.0	37.0	.5533	1.636	165	41.0	.6309	1.715	165	45.0	.6309	1.308	225	49.0	1.026	1.233	165
34	.6717	1.454	34.0	38.0	.5456	1.655	170	42.0	.6232	1.734	170	46.0	.6232	1.298	230	50.0	1.009	1.214	170
35	.6639	1.468	35.0	39.0	.5380	1.674	175	43.0	.6156	1.753	175	47.0	.6156	1.288	235	51.0	992	1.195	175
36	.6562	1.482	36.0	40.0	.5305	1.693	180	44.0	.6081	1.772	180	48.0	.6081	1.278	240	52.0	975	1.176	180
37	.6486	1.496	37.0	41.0	.5231	1.712	185	45.0	.6007	1.791	185	49.0	.6007	1.268	245	53.0	958	1.157	185
38	.6411	1.510	38.0	42.0	.5158	1.731	190	46.0	.5934	1.810	190	50.0	.5934	1.258	250	54.0	941	1.138	190
39	.6337	1.524	39.0	43.0	.5086	1.750	195	47.0	.5862	1.829	195	51.0	.5862	1.248	255	55.0	924	1.119	195
40	.6264	1.538	40.0	44.0	.5015	1.769	200	48.0	.5791	1.848	200	52.0	.5791	1.238	260	56.0	907	1.100	200
41	.6192	1.552	41.0	45.0	.4945	1.788	205	49.0	.5721	1.867	205	53.0	.5721	1.228	265	57.0	890	1.081	205
42	.6121	1.566	42.0	46.0	.4876	1.807	210	50.0	.5652	1.886	210	54.0	.5652	1.218	270	58.0	873	1.062	210
43	.6051	1.580	43.0	47.0	.4808	1.826	215	51.0	.5584	1.905	215	55.0	.5584	1.208	275	59.0	856	1.043	215
44	.5982	1.594	44.0	48.0	.4741	1.845	220	52.0	.5517	1.924	220	56.0	.5517	1.198	280	60.0	839	1.024	220
45	.5914	1.608	45.0	49.0	.4675	1.864	225	53.0	.5451	1.943	225	57.0	.5451	1.188	285	61.0	822	1.005	225
46	.5847	1.622	46.0	50.0	.4610	1.883	230	54.0	.5386	1.962	230	58.0	.5386	1.178	290	62.0	805	986	230
47	.5781	1.636	47.0	51.0	.4546	1.902	235	55.0	.5322	1.981	235	59.0	.5322	1.168	295	63.0	788	967	235
48	.5716	1.650	48.0	52.0	.4483	1.921	240	56.0	.5259	2.000	240	60.0	.5259	1.158	300	64.0	771	948	240
49	.5652	1.664	49.0	53.0	.4421	1.940	245	57.0	.5197	2.019	245	61.0	.5197	1.148	305	65.0	754	929	245
50	.5589	1.678	50.0	54.0	.4360	1.959	250	58.0	.5136	2.038	250	62.0	.5136	1.138	310	66.0	737	910	250
51	.5527	1.692	51.0	55.0	.4300	1.978	255	59.0	.5076	2.057	255	63.0	.5076	1.128	315	67.0	720	891	255
52	.5466	1.706	52.0	56.0	.4241	1.997	260	60.0	.5017	2.076	260	64.0	.5017	1.118	320	68.0	703	872	260
53	.5406	1.720	53.0	57.0	.4183	2.016	265	61.0	.4959	2.095	265	65.0	.4959	1.108	325	69.0	686	853	265
54	.5347	1.734	54.0	58.0	.4126	2.035	270	62.0	.4902	2.114	270	66.0	.4902	1.098	330	70.0	669	834	270
55	.5289	1.748	55.0	59.0	.4070	2.054	275	63.0	.4846	2.133	275	67.0	.4846	1.088	335	71.0	652	815	275
56	.5232	1.762	56.0	60.0	.4015	2.073	280	64.0	.4791	2.152	280	68.0	.4791	1.078	340	72.0	635	796	280
57	.5176	1.776	57.0	61.0	.3961	2.092	285	65.0	.4737	2.171	285	69.0	.4737	1.068	345	73.0	618	777	285
58	.5121	1.790	58.0	62.0	.3908	2.111	290	66.0	.4684	2.190	290	70.0	.4684	1.058	350	74.0	601	758	290
59	.5067	1.804	59.0	63.0	.3856	2.130	295	67.0	.4632	2.209	295	71.0	.4632	1.048	355	75.0	584	739	295
60	.5014	1.818	60.0	64.0	.3805	2.149	300	68.0	.4581	2.228	300	72.0	.4581	1.038	360	76.0	567	720	300
61	.4962	1.832	61.0	65.0	.3755	2.168	305	69.0	.4531	2.247	305	73.0	.4531	1.028	365	77.0	550	701	305
62	.4911	1.846	62.0	66.0	.3706	2.187	310	70.0	.4482	2.266	310	74.0	.4482	1.018	370	78.0	533	682	310
63	.4861	1.860	63.0	67.0	.3658	2.206	315	71.0	.4434	2.285	315	75.0	.4434	1.008	375	79.0	516	663	315
64	.4812	1.874	64.0	68.0	.3611	2.225	320	72.0	.4387	2.304	320	76.0	.4387	998	380	80.0	499	644	320
65	.4764	1.888	65.0	69.0	.3565	2.244	325	73.0	.4341	2.323	325	77.0	.4341	988	385	81.0	482	625	325
66	.4717	1.902	66.0	70.0	.3520	2.263	330	7											

15-1. TROUBLESHOOTING

NOTE: The following guide lists specific difficulties that could occur in the A-3340S. Possible causes are listed for each malfunction. Visually inspect the unit for any damage such as broken or burned components or wiring, loose connections, etc.

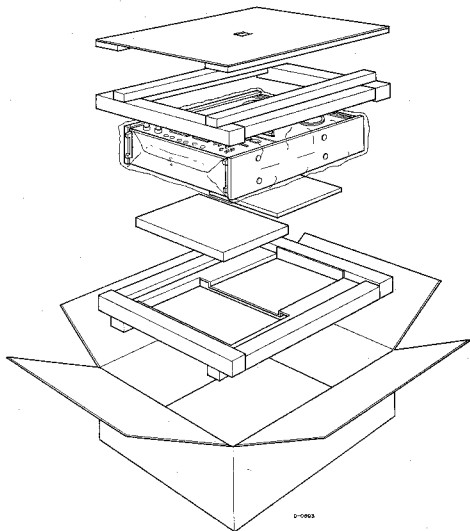
MALFUNCTION	POSSIBLE SOURCE OF TROUBLE	CORRECTIVE PROCEDURE
Capstan fails to turn	Belt off or slipping, line fuse, safety switch(SW-2), speed select switch(SW-12), phase advance capacitor(C-5)	Repair or replace the defective components.
Pinch roller fails to contact capstan in play mode	Operation relay(K-1), Start relay(K-7), Q1, STOP micro-switch(S-4), PLAY (▶) micro-switch(S-7), capstan solenoid	Refer to schematic diagram and repair or replace the defective components.
Right reel motor does not rotate in play mode. Left reel motor does not rotate in play mode. Both motors fail to operate.	Reel motor(right), brake solenoid, operation relay(K-6), resistor(R-1) Reel motor(left), brake solenoid, operation relay(K-6), resistor(R-2) Safety switch(SW-2), operation relay(K-1,K-6)	Replace the defective components.
A-3340S does not operate in PLAY (▶)	Remote control jumper plug missing or loose, STOP micro switch(S-4), brake solenoid, pause switch(S-9), operation relay(K-1,K-6), phase advance capacitor(C-5),(C-4)	Normal DC resistance of the brake solenoid is 1.3k ohms. Refer to schematic diagram and repair or replace the defective components.
Playback noise or hum	Faulty connections, SIMUL switch (S-701), faulty playback head, faulty amplifier	Repair to replace defective components.
Noise or hum during record	Magnetized head, faulty connections, MIC level set to maximum, faulty record amplifier, record relay (K501,K502,K601,K602)	Demagnetize and clean head, repair or replace defective components, check MIC VR.
Wow and flutter	Defective tape, dirty or defective pinch roller and pressure oily or defective belt, reel motor tension	Clean or replace defective components. Adjust motor tension

15-2. TROUBLESHOOTING

MALFUNCTION	POSSIBLE SOURCE OF TROUBLE	CORRECTIVE PROCEDURE
Incorrect tape speed	Drive belt in wrong position. Incorrect pinch roller pressure.	Reposition drive belt. Adjust pinch roller pressure.
Brakes do not release	Defective brake solenoid	The D.C resistance of the brake solenoid should be 1.6k ohms. Replace solenoid.
Fast forward or rewind mode inoperative	Rewind relay(K-3) Fast relay(K-2)	Refer to schematic diagram and repair or replace the defective components.
No record and/or no erase	Record head dirty, erase head dirty, operate relay (K-1), record relay(K501,K502, K601,K602), REC micro switch(S-8), record amplifier, bias OSC, record head, erase head	Refer to schematic diagram and repair or replace the defective components.
No playback	Playback head defective or dirty, amplifier-to-deck connections, monitor switch (S-712), playback amplifiers	Refer to playback amplifier voltage chart.

16. PACKING FOR SHIPMENT

Keep this Carton Box and its packing materials. For shipping, re-pack as shown in the illustration.



WARRANTY

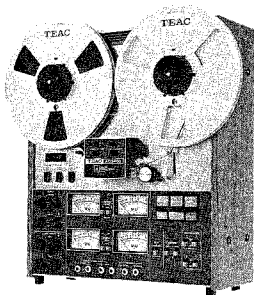
Your TEAC equipment has been manufactured under the strictest quality control and is covered by warranty under normal operation. However, warranty terms may vary with the country (area) in which it was purchased and for different models of equipment. The warranty terms are fully described on the warranty card. Please read the card for complete details. Include a copy of the warranty in the package when you return the equipment to an Authorized Service Center.

TEAC®

A-3340S

4-CHANNEL STEREO TAPE DECK

PARTS LIST



CONTENTS

EXPLODED VIEWS AND PARTS LIST

1. MAIN CHASSIS GROUP	2
2. MOTOR CHASSIS GROUP	4
3. FRONT PANEL	6
4. REAR PANEL	8

PC BOARD SECTION

1. EQ/MIC AMPLIFIER	10, 15
2. LINE/PHONE AMPLIFIER	10, 15
3. REC/METER AMPLIFIER	11, 16
4. BIAS OSCILLATORS	11, 17
5. POWER SUPPLY	12, 17
6. CONTROL RELAY	13, 17
7. SOLENOID CONTROL RELAY	13, 17
8. BIAS PC BOARD-A	14, 18
9. BIAS PC BOARD-B	14, 18

INCLUDED ACCESSORIES	18
ASSEMBLING HARDWARE CODING LIST	19

PARTS ORDERING INFORMATION

Spare parts are available through your nearest TEAC Authorized Service Center or directly from the TEAC office, the address of which is written on the back cover. When ordering parts, always include the following information:

- | | |
|--------------|--------------------|
| 1. MODEL | 4. DESCRIPTION |
| 2. REF. NO. | 5. UNIT SERIAL NO. |
| 3. PARTS NO. | 6. MANUAL CODE NO. |

NOTICE REGARDING PARTS ORDERS

- Do not order by only REF. NO.
- In some instances, individual minor parts are not available. In such a case, the entire assembly including the part requested will be sent to you.

PARTS IDENTIFICATION CODING

Parts are identical between the different models with the exceptions as coded by the designations explained below.

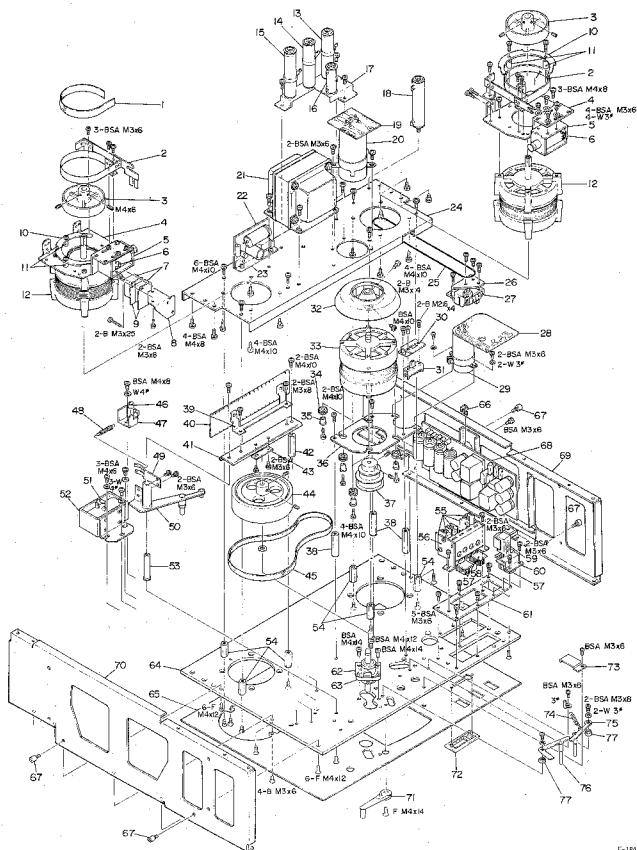
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|--------|---|
| JAPAN | Domestic (Japan) market decks only. |
| U.S.A. | TEAC Corporation of America, U.S.A. version only. |
| CANADA | Canada version only. |
| EUROPE | European market decks (except United Kingdom). |
| EXPORT | All decks not specified above (incl. U.K.). |

1-1. MAIN CHASSIS GROUP



REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
1- 1	50136321	Cap, Slide Switch; B	
1- 2	55505330	Mask, Slide Switch	
1- 3	51681730	PC Board Assy, Simul-Sync	
	50444700	Switch, Slide; Simul-Sync	
1- 4	55403510	Spacer, Simul-Sync Switch Assy	
1- 5	55505140	Bracket, Head Protector; A	
1- 6	55505120	Plate, Head Base	
1- 7	50220500	Spring, Head; B	
1- 8	50134371	Plate, Head	
1- 9	50136591	Spacer, Erase Head	
1-10	50134390	Spacer, Head	
1-11	50136790	Head Shield, Front; A	
1-12	50664350	Head, Playback (4T - 4CH)	
1-13	50664250	Head, Record (4T - 4CH)	
1-14	55505150	Bracket, Head Protector; B	
1-15	50664110	Head, Erase (4T - 4CH)	
1-16	50182672	Pin, Tape Guide	
1-17	55505320	Plate, Housing Base	
1-18	55542110	Plate, Head Housing	
1-19	55505100	Name Plate, A	
1-20	50136292	Head Housing	
1-21	55403520	Sleeve, Head Assy Mtg Screw	
1-22	50112980	Grille Assy, Top	
1-23	55040870	Reel Table Assy	
1-24	50288200	Sideboard	
1-25	50180590	Tension Arm Assy, Left	
1-26	50182701	Bushing, Arm; A	
1-27	50276870	Anchor, Spring; Left	
1-28	50221110	Spring, B	
1-29	50182750	Travel Limiter; Tension Arm	
1-30	50276990	Collar, Rubber	
1-31	50123910	Cap, Guide Ring	
1-32	50123930	Ring, Guide	
1-33	50123921	Guide Ring Base	
1-34	50125351	Cap, Dust	
1-35	50142180	Cap, Pinch Roller	
1-36	50141751	Pinch Roller	
1-37	50180432	Tension Arm Assy, Right	
1-38	50182701	Bushing, Arm; A	
1-39	50221122	Spring, C	
1-40	50103921	Drum, Tension Arm	
1-41	50182731	Limit Stop, Right	
1-42	50529050	Spark Killer, 0.1 μ F+120 Ω 400V	
1-43	50183931	Spacer, Insulator Paper	
1-44	51300010	Switch, Micro; V-1A-44	
1-45	50276930	Washer, Trim	
1-46	50235312	Angle, Rear Cover	
1-47	55530320	Cover, Rear	
1-48	50277111	Washer, Trim	
1-49	55330180	Leg, Case; Right	
1-50	55330190	Leg, Case; Left	
1-51	55040581	Cover Assy, Bottom	

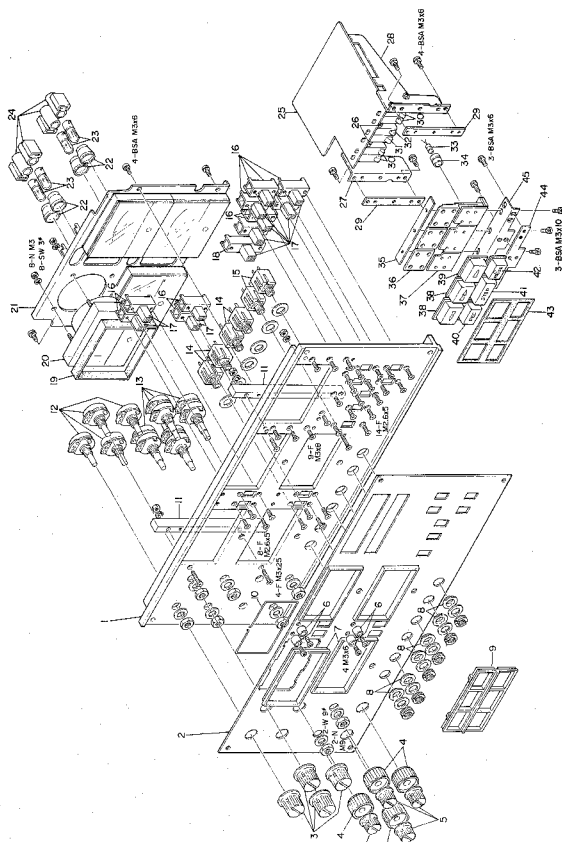
1-2. MOTOR CHASSIS GROUP



REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
2 - 1	55541560	Felt, Brake	
2 - 2	50173811	Brake Band Assy, P	
2 - 3	50173570	Drum, Brake	
2 - 4	50173601	Plate, Reel Motor; P	
2 - 5	50616770	Solenoid, Brake	
2 - 6	50422570	Diode, SIB 01-06	
2 - 7	50446180	Switch, Micro; V-1A-44	
2 - 8	50173640	Plate, Micro Switch	
2 - 9	50332680	Spacer, Insulator Paper	
2 - 10	50173481	Retainer, Brake Shaping	
2 - 11	50173490	Spacer, Brake Shaping Retainer	
2 - 12	71041070	Motor, Reel	
2 - 13	50522280	Resistor, Wire wound, 250Ω 30HA	
2 - 14	50522290	Resistor, Wire wound, 150Ω 30HA	
2 - 15	50522230	Resistor, Wire wound, 100Ω 30HA	
2 - 16	50524440	Resistor, Wire wound, 1.5Ω 10H	
2 - 17	50235661	Plate, Resistor	JAPAN, U.S.A., CANADA
	55505340	Plate, Resistor; E	EXPORT, EUROPE
2 - 18	50522320	Resistor, Wire wound; 600Ω 40H	
2 - 19	50491353	PC Board Assy, MP Capacitor	
2 - 20	51700050	Capacitor, MP (7.0±1.5)μF×2 250V	
2 - 21	50563342	Transformer, Power	JAPAN
	50563360	Transformer, Power	U.S.A., CANADA
	50563370	Transformer, Power	EXPORT, EUROPE
2 - 22	50490912	PC Board Assy, Solenoid Control Relay	JAPAN
	50491582	PC Board Assy, Solenoid Control Relay	U.S.A., CANADA
	50491600	PC Board Assy, Solenoid Control Relay	EXPORT, EUROPE
2 - 23	55505351	Angle, PC Board; E	
2 - 24	55520040	Chassis, Reel Motor; B	
2 - 25	50332530	Belt, Counter; P	
2 - 26	50332520	Plate, Counter	
2 - 27	50585140	Counter, Index	
2 - 28	50491401	PC Board Assy, Terminal	
2 - 29	50545650	Capacitor, MP (2.0±0.8)μF 250V	
2 - 30	50332380	Bracket, Slide Switch	JAPAN, EXPORT, EUROPE
2 - 31	50444610	Switch, Slide; Freq. Conv.	JAPAN, EXPORT, EUROPE
2 - 32	50123983	Fan, Motor Cooling	
2 - 33	50701341	Motor, Capstan	
2 - 34	60706211	Cushion, Rubber	
2 - 35	50332790	Spacer, Rubber Cushion	
2 - 36	50237520	Plate, Capstan Motor	
2 - 37	50124003	Pulley, Motor	JAPAN, EXPORT, EUROPE
	50125121	Pulley, Motor	U.S.A., CANADA
2 - 38	50123850	Standoff, Capstan Motor	
2 - 39	55505090	Bracket, Terminal PC Board Assy	
2 - 40	51681720	PC Board Assy, Terminal	
2 - 41	50277151	Angle, Thrust	
2 - 42	50123860	Standoff, Flywheel	
2 - 43	50277232	Plate, Thrust	
2 - 44	50123802	Flywheel, Capstan	
2 - 45	50125340	Belt, Capstan	
2 - 46	50276690	Cushion, Rubber	
2 - 47	50141842	Limit Stop, Pinch Roller	
2 - 48	50220441	Spring, Return	
2 - 49	50221152	Spring, Pressure	
2 - 50	50140236	Arm Assy, Pinch Roller	
2 - 51	50422570	Diode, SIB 01-06	
2 - 52	50616760	Solenoid Assy, Pinch Roller	
2 - 53	50141821	Shaft, Roller Arm	
2 - 54	50161950	Standoff, Reel Motor	
2 - 55	50332671	Spacer, Insulator Paper	
2 - 56	50443902	Switch Assy, Selector; REEL/SPEED	

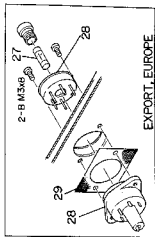
(Continued on page 9.)

1-3. FRONT PANEL



REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
3 - 1	55520460	Panel, Ampl.	
3 - 2	55020290	Panel, Ampl. Trim	
3 - 3	55340910	Knob, A	
3 - 4	55040590	Knob, Lower	
3 - 5	50253750	Knob	
3 - 6	50236430	Escutcheon, Record Lamp	
3 - 7	50236500	Escutcheon, VU Meter	
3 - 8	50332850	Washer, Insulating; Jack	
3 - 9	55320060	Escutcheon, Button	
3 - 10	50236512	Clamp, Meter Escutcheon	
3 - 11	50236420	Retainer, VU Meter	
3 - 12	50535240	Var. Res., 100k Ω	
3 - 13	51501170	Var. Res., Outer Shaft 100k Ω /Inner 10k Ω	
3 - 14	50430240	Jack, Phone; 2 cond. (MIC)	
3 - 15	50432450	Jack, Phone; 3 cond. (PHONES)	
3 - 16	50440000	Switch, Slide	
3 - 17	55340710	Cap, Slide Switch; C	
3 - 18	50444450	Switch, Slide; Play	
3 - 19	50939110	Band, VU Meter	
3 - 20	50581381	VU Meter	
3 - 21	55003540	Plate Assy, VU Meter; S	
3 - 22	50419070	Sleeve, Record Lamp	
3 - 23	50414580	Lamp, Bayonet Type; Record (8V)	
3 - 24	50415250	Socket, Record Lamp	
3 - 25	50490892	PC Board Assy, Control Relay	
3 - 26	50237160	Spacer	
3 - 27	50237131	Plate, Switch; L	
3 - 28	50237141	Plate, Switch; R	
3 - 29	50237121	Plate	
3 - 30	50446580	Switch, Micro; VV-15-3A	
3 - 31	50446560	Switch, Micro; VV-15-1A	
3 - 32	50446570	Switch, Micro; VV-15-2A	
3 - 33	50414630	Lamp, Subminiature; PAUSE	
3 - 34	50237490	Cushion, Lamp	
3 - 35	50237291	Plate Nut, Retaining	
3 - 36	55340430	Hinge, A	
3 - 37	55340440	Hinge, B	
3 - 38	55340730	Button, B	
3 - 39	55340720	Button, A	
3 - 40	55300731	Button, REC	
3 - 41	55340740	Button, STOP	
3 - 42	50237262	Button Assy, PAUSE	
3 - 43	50237300	Rubber Protector, P	
3 - 44	55505210	Plate Nut, Hinge; S	
3 - 45	55505200	Bracket, Hinge; S	

1-4. REAR PANEL



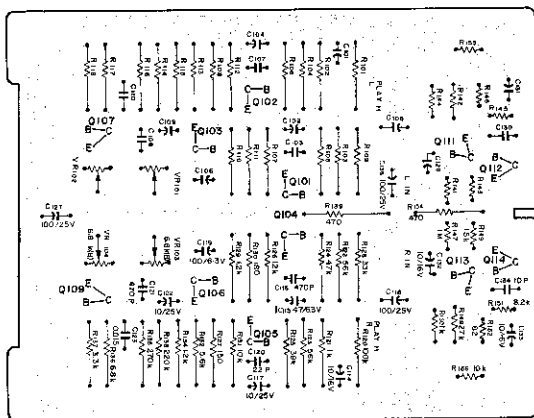
REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
4 - 1	55505261	Panel, Rear Connection	JAPAN, U.S.A., CANADA
4 - 2	55505221	Chassis, Ampl; Main	
4 - 3	55505230	Chassis, Ampl; Sub	
4 - 4	50236480	Hinge	
4 - 5	55501151	Plate, Fuse Holder	
4 - 6	50432950	Socket, AC	
4 - 7	50432700	Socket, 11P	
4 - 8	50434632	Jack, Pin; 2P	
4 - 9	50452060	Terminal Strip, 1L-2P	
4 - 10	51680660	PC Board Assy, REC EQ Relay	
4 - 11	55505281	Angle, PC Board; S	
4 - 12	50490630	PC Board Assy, Bias Oscillator	
4 - 13	51681710	PC Board Assy, MIG/PB EQ Ampl.	
4 - 14	51681690	PC Board Assy, Line Out/Phone Ampl.	
4 - 15	51681702	PC Board Assy, Meter/Record EQ Ampl.	
4 - 16	51680541	PC Board Assy, Bias Adjustment; A	
4 - 17	51680581	PC Board Assy, Bias Adjustment; B	
4 - 18	50233760	Plate, PC Board	JAPAN, EXPORT, EUROPE U.S.A., CANADA
4 - 19	50236490	Standoff, Ampl Chassis	
4 - 20	50436630	Connector, 15P (Plug)	
4 - 21	50436520	Connector, 15P (Plug)	JAPAN, EXPORT, EUROPE U.S.A., CANADA
4 - 22	50438310	Connector, 15P (Socket)	
4 - 23	50438300	Connector, 15P (Socket)	JAPAN U.S.A. JAPAN U.S.A.
4 - 24	50433010	Dummy Plug	
4 - 24	50824500	Fuse Holder	
4 - 25	50412280	Fuse Holder	EXPORT, EUROPE EXPORT, EUROPE EXPORT, EUROPE
4 - 25	50411140	Fuse, 2A	
4 - 25	50411440	Fuse, 2A-250V	
4 - 26	50454071	Post, Grounding	EXPORT, EUROPE EXPORT, EUROPE EXPORT, EUROPE
4 - 27	50411010	Fuse, 1A	
4 - 27	50411440	Fuse, 2A	
4 - 28	50435030	Voltage Selector, w/Fuse	EXPORT, EUROPE EXPORT, EUROPE
4 - 29	55501500	Mask, Fuse	

1-2. MOTOR CHASSIS GROUP (Continued from page 5.)

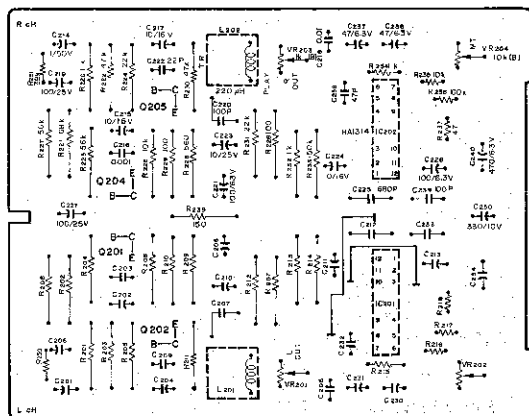
REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
2 - 57	50253530	Button, D	JAPAN, EXPORT, EUROPE U.S.A., CANADA
2 - 58	50253880	Mask, Switch	
2 - 59	50443870	Switch, Power	
2 - 59	50444560	Switch, Power	
2 - 60	50237083	Plate, Power Switch	
2 - 61	50237391	Plate, Selector Switch	
2 - 62	50142190	Plate, Arm Support	
2 - 63	50120450	Capston Assy	
2 - 64	50114244	Panel, Chassis	
2 - 65	55020280	Panel, Trim; B	
2 - 66	55505310	Angle, PC Board	
2 - 67	55810370	Screw, Guide	
2 - 68	51680532	PC Board Assy, Power Supply	
2 - 69	55030220	Panel Assy, Side; Left	
2 - 70	55030230	Panel Assy, Side; Right	
2 - 71	55030241	Arm Assy, Cue	
2 - 72	50162980	Eycutcheon, Counter (Cover)	
2 - 73	50152453	Plate, Lifter	
2 - 74	50221100	Spring, Lifter, A	
2 - 75	50150253	Arm Assy, Lifter; B	
2 - 76	50150243	Arm Assy, Lifter; A	
2 - 77	50152502	Shaft, Lifter, Arm	

2. PC BOARD SECTION (Diagram)

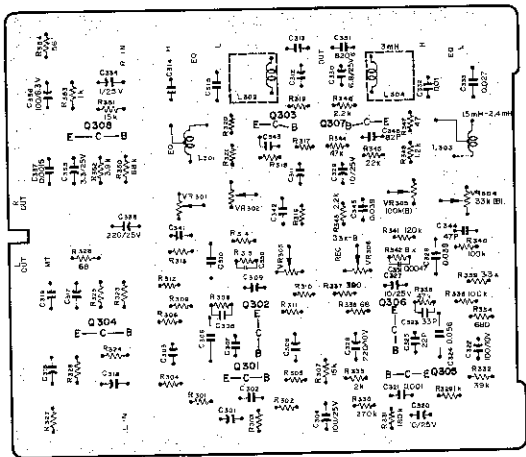
2-1. EQ/MIC AMPLIFIER



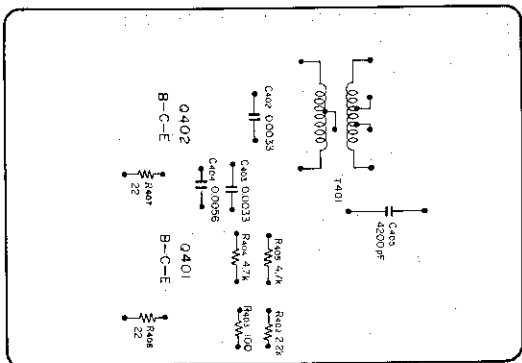
2-2. LINE/PHONE AMPLIFIER



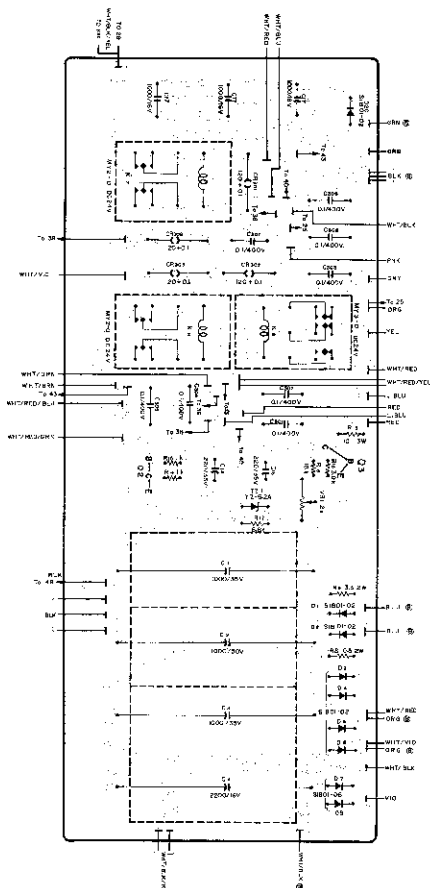
2-3. REC/METER AMPLIFIER



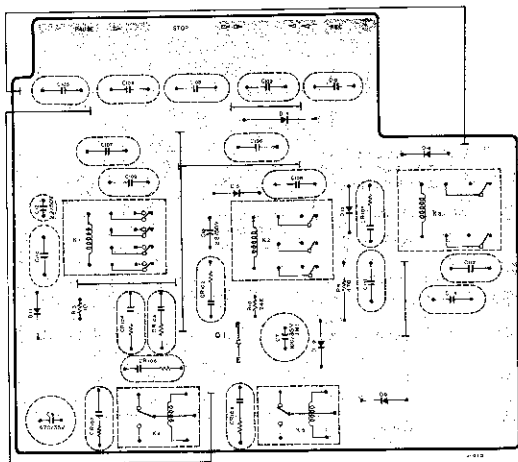
2-4. BIAS OSCILLATORS



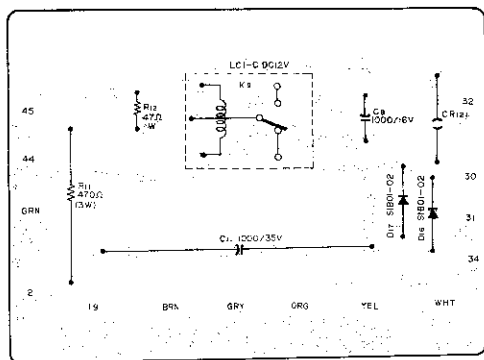
2-5. POWER SUPPLY



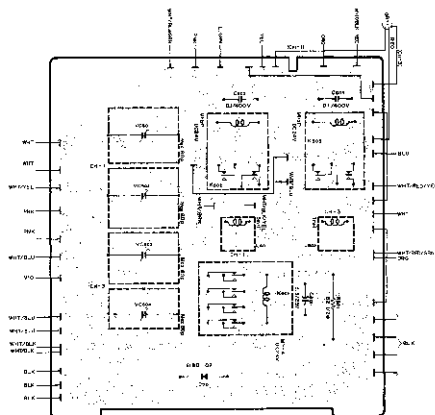
2-6. CONTROL RELAY



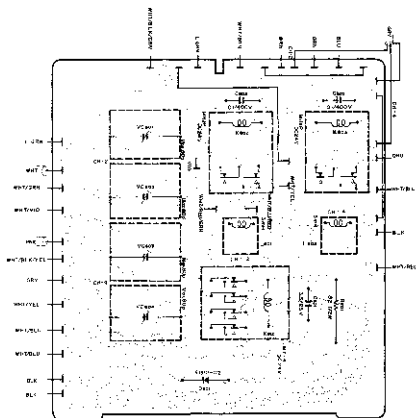
2-7. SOLENOID CONTROL RELAY



2-8. BIAS PC BOARD-A



2-9. BIAS PC BOARD-B



2. PC BOARD SECTION (Parts List)

2-1. EQ/MIC AMPLIFIER

REF. NO.	PARTS NO.	DESCRIPTION	REF. NO.	PARTS NO.	DESCRIPTION
	51681/10	PC Bd. Assy	C110/C123	50548420	Mylar 0.015 μ F 50V
	51670501	PC Board	C127	50554170	Elec. 100 μ F 25V
			C128/C132	50554050	Elec. 10 μ F 16V
			C130/C134	50547400	Dip. Mica 10 μ F 60V
			C131/C135	50554050	Elec. 10 μ F 16V
			C136	50554170	Elec. 100 μ F 25V
TRANSISTORS					
Q101/Q104	50424610	2SC1327-T	J101/J102	50435000	Jack, Pin
Q102/Q105	50474870	2SA763-YL (5)			
Q103/Q106	50424600	2SC828-S			
Q107/Q109	50424600	2SC828-S			
Q111/Q113	50424610	2SC1327-T			
Q112/Q114	50474870	2SA763-YL (5)			

2-2. LINE/PHONE AMPLIFIER

CARBON RESISTORS

All resistors are rated 10% tolerance and 1/4 watt

REF. No.	PARTS NO.	DESCRIPTION
R101/R120	50573300	100k Ω
R102/R121	50513430	1k Ω
R103/R122	50513990	56k Ω
R104/R123	50513990	56k Ω
R105/R124	50513870	47k Ω
R106/R125	50518860	39k Ω
R107/R126	50513580	12k Ω
R108/R127	50513320	150 Ω
R109/R128	50518840	33k Ω
R110/R129	50513440	1.2k Ω
R111/R130	50518770	180 Ω
R112/R131	50513570	10k Ω
R113/R132	50513880	5.6k Ω
R114/R133	50518880	220k Ω
R115/R134	50513440	1.2k Ω
R116/R135	50518880	270k Ω
R117/R136	50573020	6.8k Ω
R118/R137	50572940	3.3k Ω
R139	50518790	470 Ω
R141/R147	50573540	1M Ω
R147/R148	50513860	27k Ω
R143/R149	50571100	15k Ω
R144/R150	50513430	1k Ω
R145/R151	50571040	8.2k Ω
R146/R152	50518760	82 Ω
R154	50518790	470 Ω
R155/R156	50513570	10k Ω
		IC's
JC201/JC202	50427150	HA1314
		TRANSISTORS
Q201/Q204	50423770	2SC644-T
Q202/Q205	50424660	2SA564-R

CARBON RESISTORS

All resistors are rated 10% tolerance and 1/4 watt.

REF. No.	PARTS NO.	DESCRIPTION
R201/R220	50513430	1k Ω
R202/R221	50518860	68k Ω
R203/R222	50513870	47k Ω
R204/R223	50513990	56k Ω
R205/R224	50513830	22k Ω
R206/R225	50513570	10k Ω
R207/R226	50513300	100 Ω
R208/R227	50513990	56k Ω
R209/R228	50513210	560 Ω
R210/R229	50513300	100 Ω
R211/R230	50513970	4.7k Ω
R212/R231	50513930	22k Ω
R213/R232	50513430	1k Ω
R214/R233	50515660	150k Ω
R215/R234	50513430	1k Ω
R216/R235	50513570	10k Ω
R217/R236	50573300	100k Ω
R218/R237	50572600	47 Ω
R239	50513320	150 Ω
R250/R251	50571200	39k Ω
		SEMI FIXED RESISTORS
VR101/VR103	50533580	6.8k Ω (B) 10 μ
VR102/VR104	50533580	6.8k Ω (B) 10 μ
		CAPACITORS
C101/C114	51700690	Tant. 10 μ F 16V
C102/C115	50554030	Elec. 47 μ F 6.3V
C103/C116	50547560	Dip. Mica 470pF 50V
C104/C117	51700620	Film. 10 μ F 25V (LRI)
C105/C118	50554170	Elec. 100 μ F 25V
C106/C119	50554230	Elec. 100 μ F 6.3V
C107/C120	50543820	Dip. Mica 22pF 50V
C108/C121	50547560	Dip. Mica 470pF 50V
C109/C122	51700620	Elec. 10 μ F 25V (LRI)
		SEMI FIXED RESISTORS
VR201/VR203	50533960	1k Ω (B) 10 μ
VR202/VR204	50533480	10k Ω (B) 10 μ

REF. NO.	PARTS NO.	DESCRIPTION
CAPACITORS		
C201/C214	51700860	Elec. 1 μ F 50V(LR)
C202/C215	50554050	Elec. 10 μ F 16V
C203/C216	50548320	Mylar 0.001 μ F 50V
C204/C217	50554050	Elec. 10 μ F 16V
C205/C218	50548020	Mylar 0.01 μ F 50V
C206/C219	50554170	Elec. 100 μ F 25V
C207/C220	50537440	Dip. Mica 100 μ F 50V
C208/C221	50554230	Elec. 100 μ F 6.3V
C209/C222	50543820	Dic. Mica 22 μ F 50V
C210/C223	51700820	Elec. 10 μ F 25V(LR)
C211/C224	50554050	Elec. 10 μ F 16V
C212/C225	50547470	Dip. Mica 680pF 50V
C213/C226	50554230	Elec. 100 μ F 6.3V
C227	50554170	Elec. 100 μ F 25V
C230/C235	50554030	Elec. 47 μ F 6.3V
C231/C237	50554030	Elec. 47 μ F 6.3V
C232/C238	50547420	Dip. Mica 47pF 50V
C233/C239	50547440	Dip. Mica 100pF 50V
C234/C240	50554600	Elec. 470 μ F 6.3V
C250	50554920	Elec. 330 μ F 10V

COILS

L201/L202	50566040	Choke 220 μ H
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2-3. REC/METER AMPLIFIER

REF. NO.	PARTS NO.	DESCRIPTION
	51651702	PC Bd. Assy
	51670520	PC Board (an.v)

TRANSISTORS

Q301/Q305	50423770	2SC644-T
Q302/Q306	50474140	78A577-YL
Q303/Q307	50424600	2SC828-S
Q304/Q308	50424600	2SC828-S

CARBON RESISTORS

All resistors are rated 10% tolerance and 1/4 watt.

R301/R329	50570820	1k Ω
R302/R330	50571400	270k Ω
R303/R331	50571360	180k Ω
R304/R332	50571200	39k Ω
R305/R333	50571080	12k Ω
R306/R334	50570780	680 Ω
R308/R335	50571220	47k Ω
R309/R336	50571300	100k Ω

REF. NO.	PARTS NO.	DESCRIPTION
R310/R337	50570720	300 Ω
R311/R338	50570540	36 Ω
R312/R339	50570940	3.3k Ω
R313/R340	50571300	100k Ω
R314/R341	50571320	120k Ω
R315/R342	50571120	18k Ω
R316/R343	50570900	2.2k Ω
R317/R344	50571220	47k Ω
R318/R345	50571140	22k Ω
R319/R346	50570900	2.2k Ω
R320/R347	50570500	47 Ω
R321/R348	50570840	1.2k Ω
R323/R350	50571260	68k Ω
R324/R351	50571100	18k Ω
R325/R352	50570960	3.9k Ω
R326/R353	50570870	1k Ω
R327/R354	50570520	56 Ω
R328	50570540	68 Ω

SEMIFIXED RESISTORS

VH301/VH304	50534120	33k Ω (B) 10 ϕ
VH302/VH305	50533490	100k Ω (B) 10 ϕ
VH303/VH306	50534120	33k Ω (B) 10 ϕ

CAPACITORS

C301/C320	50554040	Elec. 10 μ F 25V
C302/C321	50548320	Mylar 0.001 μ F 50V
C303/C322	50554570	Elec. 100 μ F 10V
C304	50554170	Elec. 100 μ F 25V
C305/C323	50547590	Dip. Mica 33pF 50V
C306/C324	50548460	Mylar 0.006 μ F 50V
C307/C325	50543820	Dip. Mica 22pF 50V
C308/C326	50554910	Elec. 220 μ F 10V
C309/C327	51700820	Elec. 10 μ F 25V(LR)
C310/C328	50548030	Mylar 0.030 μ F 50V
C311/C329	50554040	Elec. 10 μ F 25V
C312/C330	50546627	Dip. Tant. 6.8 μ F 25V
C313/C331	50542440	Polyst. 820pF 50V
C314/C332	50548020	Mylar 0.01 μ F 50V
C315/C333	50548330	Mylar 0.027 μ F 50V
C316/C334	50554570	Elec. 1 μ F 25V
C317/C335	50554140	Elec. 3.3 μ F 25V
C318/C336	50554230	Elec. 100 μ F 6.3V
C319/C337	50548120	Mylar 0.0015 μ F 50V
C338	50555520	Elec. 220 μ F 25V

C341/C344	50547420	Dip. Mica 47pF 50V
C342/C345	50548530	Mylar 0.039 μ F 50V
C343/C346	50547580	Dip. Mica 82pF 50V
C340/C351	50548130	Mylar 0.0047 μ F 50V

COILS

L301/L303	50566670	Record EQ 1.5/2 4mH
L302/L304	50566300	Trap 3mH

2-4. BIAS OSCILLATORS

REF. NO.	PARTS NO.	DESCRIPTION
	50490830	PC Bd. Assy
	50483322	PC Board
Q401, Q402	50424480	Transistor 2SC1225A-B
R402	50514920	Carbon 2.2k Ω 1/2W
R403	50515210	Carbon 100 Ω 1/4W
R404, R405	50516440	Carbon 4.7k Ω 1/2W
R406, R407	50518130	Carbon 22 Ω 1/2W
C402, C403	50543810	Mylar 0.0033 μ F 50V 5%
C404	50544040	Mylar 0.0056 μ F 50V 5%
C405	50548920	Mica 4200 μ F 250V 5%
T401	50563231	Transformer, Oscillator

2-5. POWER SUPPLY

REF. NO.	PARTS NO.	DESCRIPTION
	51690533	PC Bd. Assy
	51670532	PC Board
Q2	50424620	Transistor 2SD235-Y
Q3	50424620	Transistor 2SC733-GR
D1~D6	50422660	Diode S1B01-02
D7, D8	50422670	Diode S1B01-06
U20	50422660	Diode S1B01-02
U21	50422660	Diode Zener; QZ2-6.2A
K6	50611140	Relay MY2-0 24V DC
K7	50611160	Relay MY2-0 24V DC
K8	50611120	Relay MY3-0 24V DC
VR1	50534260	Trimmer Resistor 2k Ω 10 Ω
R6	50526400	Wire Wound 3.3 Ω 2W
R8	50526150	Wire Wound 0.5 Ω 2W
R14, R15	50570820	Carbon 1k Ω 1/4W
R16	50570960	Carbon 3.9k Ω 1/4W
H17	50515470	Carbon 6.8k Ω 1/4W
R18	50515520	Carbon 18k Ω 1/4W
R18	50528010	Wire Wound 10 Ω 3W
C1, C3	50555110	Elec. 1000 μ F 35V
C2	50555700	Elec. 1000 μ F 50V
C4	50555660	Elec. 2200 μ F 16V
C14, C15	50554380	Elec. 220 μ F 35V
C17	50554890	Elec. 1000 μ F 16V
C301~C307	50548390	Metalized Mylar 0.1 μ F 400VAC
C308	50548390	Metalized Mylar 0.1 μ F 400VAC
CR301, CR302	50529050	Spark Killer 0.1 μ F+ 170 Ω 400WV
CR303	50529050	Spark Killer 0.1 μ F+ 170 Ω 400WV
	55505300	Heat Sink

2-6. CONTROL RELAY

REF. NO.	PARTS NO.	DESCRIPTION
	50490592	PC Bd. Assy
	50484130	PC Board
Q1	50424620	Transistor 2SD235-Y
K1	50611180	Relay 24VDC 24V DC
K2	50611120	Relay MY3-0 24V DC
K3	50611140	Relay MY2-0 24V DC
K4	50611200	Relay LC1-C 24V DC
K5	50611170	Relay LC1-C 24V DC
D9~D15	50422660	Diode S1B01-02
R9	50574740	Carbon 470 Ω 1/2W
R13	50526720	Wire Wound 10 Ω 1/2W
C7	51700070	Elec. 100 μ F 50V
C9	50554620	Elec. 470 μ F 35V
C10, C12	50554980	Elec. 2.2 μ F 50V
C101~C113	50549920	Metalized Mylar 0.1 μ F 400VAC
CR102~CR108	50529050	Spark Killer 0.1 μ F+ 120 Ω 400WV

2-7. SOLENOID CONTROL RELAY

REF. NO.	PARTS NO.	DESCRIPTION
	50490512	PC Bd. (JAPAN)
	50491592	PC Bd. Assy (U.S.A.)
	50491600	PC Bd. Assy (EXPORT, EUROPE)
	50484071	PC Board
K9	50611130	Relay LC1-C 12V DC
CH121	50529050	Spark Killer 0.1 μ F+ 120 Ω 400WV
R11	50527140	Metal Oxide Film 470 Ω 3W 5%
R12	50526140	Wire Wound 47 Ω 1/2W
C8	50554890	Elec. 1000 μ F 16V
C11	50555100	Elec. 1000 μ F 35V
D16, D17	50422660	Diode S1B01-02

2-8.9. BIAS PC BOARD-A, B

REF. NO.	PARTS NO.	DESCRIPTION
FRONT	REAR	
	51680541	PC Bd. Assy, A
	51680581	PC Bd. Assy, B
	51670541	PC Board, A
	51670581	PC Board, B
VC/501/VC503	VC601/VC603	50547070 Trimmer Capacitor, 80pF Max.
VC/502/VC504	VC602/VC604	50547070 Trimmer Capacitor, 80pF Max.
L501/L502	L601/L602	50566620 Coil, Dummy Load: 3mH
D501	D601	50422560 Diode, 1S1801-02
R501	R601	50510080 Carbon, 82Ω 1/2W
K501	K601	50510690 Relay, 4T 24V DC
K502/K503	K602/K603	50511260 Relay, 2T 24V DC
C501	C601	50554220 Elec, 3.3μF 25V
C502/C503	C602/C603	50549920 Mylar, 0.1μF 400V

INCLUDED ACCESSORIES

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	51286250	AC Power Cord	JAPAN
	50479772	AC Power Cord	EXPORT
	50478250	AC Power Cord	U.S.A.
	51280120	AC Power Cord	CANADA
	51280010	Cords, Input-Output Connection, x 4	
	50411440	Fuse, 2A-250V	U.S.A., CANADA
	RE-1002	Empty Reel, 10inch	
	55980250	Reel Adapter Clamp ITZ-6121, x 2	
	50291860	Oil and Applicator	
	50100300	Cleaning Stick (ITZ-275)	
	50629620	Splicing Tape	
	50291350	Silicone Cloth	
	50276971	Rubber Feet (for Horizontal Use), x 4	
	51013530	A-3340S Owner's Manual	JAPAN
	51013500	A-3340S Owner's Manual	EXPORT, EUROPE
	51013390	A-3340S Owner's Manual	U.S.A., CANADA
	51013371	Information Supplement (Open Reel)	EXPORT, EUROPE, U.S.A., CANADA

NOTE: * The Empty Reel is available as an Optional Accessory and thus is not assigned a special TEAC Parts number. Please order this by the MODEL CODE NUMBER (RE-1002). This number is included on the package.

ASSEMBLING HARWARE CODING LIST

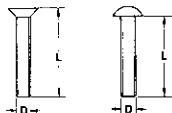
All screws conform to ISO standards, and have cross-recessed heads, unless otherwise noted.
ISO screws have the head inscribed with a point as in the figure to the right.



FOR EXAMPLE:

B M3 x 6

..... Length in mm (L)
..... Diameter in mm (D)
..... Type of Head



	Code	Full Name	Type		Code	Full Name	Type
MACHINE SCREW	R	Round Head Screw		TAPPING SCREW	BTA	Binding Head Tapping Screw(A Type)	
	P	Pan Head Screw			BTB	Binding Head Tapping Screw(B Type)	
	T	Stove Head Screw (Truss)			RTA	Round Head Tapping Screw(A Type)	
	B	Binding Head Screw			RTB	Round Head Tapping Screw(B Type)	
	F	Flat Countersunk Head Screw		SETSCREW	SF	Hex Socket Setscrew(Flat Point)	
	O	Oval Countersunk Head Screw			SC	Hex Socket Setscrew(Cup Point)	
WOOD SCREW	RW	Round Head Wood Screw			SS	Socket Setscrew(Flat Point)	
	FW	Flat Countersunk Wood Screw		WASHER	E	E-Ring (Retaining Washer)	
	OW	Oval Countersunk Wood Screw			W	Flat Washer (Plain)	
SEMS SCREW	BSA	Binding Head SEMS Screw(A Type)			SW	Lock Washer (Spring)	
	BSB	Binding Head SEMS Screw(B Type)			LWI	Lock Washer (Internal Teeth)	
	BSF	Binding Head SEMS Screw(F Type)			LWE	Lock Washer (External Teeth)	
	PSA	Pan Head SEMS Screw(A Type)			TW	Trim Washer (Countersunk)	
	PSB	Pan Head SEMS Screw(B Type)		NJT	N	Hex Nut	

T-310

TEAC CORPORATION

3-7-3 NAKA-CHO, MUSASHINO, TOKYO PHONE: (0422) 53-1111

TEAC CORPORATION OF AMERICA

7731 TELEGRAPH ROAD, MONTEBELLO, CALIFORNIA 90640

PHONE: (213) 726 0303

TEAC TONBAND-ANLAGEN**VERTRIEBS GmbH**

6200 WIESHADE-ERBENHEIM, EGERSTRASSE 2, WEST GERMANY

PHONE: (06121) 74225 ~ 8

TEAC HONGKONG LIMITED11A178, PORTLAND HOUSE, 7TH FLOOR, BLOCK C, No. 41 D, MATAL WAI ROAD,
KOWLOON, HONG KONG. PHONE: 1-655903

A-33406 ELECTRICAL ADJUSTMENTS

Unlabeled procedures refer only to FRONT channels (L1 R3).
The same procedures also apply to REAR channels (L2 R4).
Before performing checks set all head function selector switches to NORMAL position.
QUIET 7575V

ITEM	SIGNAL SOURCE	MEASUREMENT CONNECTION	INSTRUCTIONS	MODE	ADJUSTING POINT (on P.C.B.)	ADJ. LOCATION
Power Supply Check & Adj.	NO signal	V170M output 1P 30 and ground	1. Remove meter leads and REAR TOP and Baffle 30705 2. Power ON 3. Adjust for 1.25V RF		V171 (2) V170M SUPPLY	See Fig. 1
PLAYBACK PERFORMANCE						
Head Adjustment	FLIC Test Tape V171 (2) 1. 400 Hz and 1. 400 Hz	V170M & C100A1200 10 000P.F. 100K	1. Tune SPEED SW to LOW 2. Adjust for 1000 Hz 3. Tune V171 SW to 1000 Hz 4. Adjust for 1000 Hz 5. Adjust for 1000 Hz		V171 V172 V173 V174 V175 V176 V177 V178 V179 V180 V181 V182 V183 V184 V185 V186 V187 V188 V189 V190 V191 V192 V193 V194 V195 V196 V197 V198 V199 V200 V201 V202 V203 V204 V205 V206 V207 V208 V209 V210 V211 V212 V213 V214 V215 V216 V217 V218 V219 V220 V221 V222 V223 V224 V225 V226 V227 V228 V229 V230 V231 V232 V233 V234 V235 V236 V237 V238 V239 V240 V241 V242 V243 V244 V245 V246 V247 V248 V249 V250 V251 V252 V253 V254 V255 V256 V257 V258 V259 V260 V261 V262 V263 V264 V265 V266 V267 V268 V269 V270 V271 V272 V273 V274 V275 V276 V277 V278 V279 V280 V281 V282 V283 V284 V285 V286 V287 V288 V289 V290 V291 V292 V293 V294 V295 V296 V297 V298 V299 V300 V301 V302 V303 V304 V305 V306 V307 V308 V309 V310 V311 V312 V313 V314 V315 V316 V317 V318 V319 V320 V321 V322 V323 V324 V325 V326 V327 V328 V329 V330 V331 V332 V333 V334 V335 V336 V337 V338 V339 V340 V341 V342 V343 V344 V345 V346 V347 V348 V349 V350 V351 V352 V353 V354 V355 V356 V357 V358 V359 V360 V361 V362 V363 V364 V365 V366 V367 V368 V369 V370 V371 V372 V373 V374 V375 V376 V377 V378 V379 V380 V381 V382 V383 V384 V385 V386 V387 V388 V389 V390 V391 V392 V393 V394 V395 V396 V397 V398 V399 V400 V401 V402 V403 V404 V405 V406 V407 V408 V409 V410 V411 V412 V413 V414 V415 V416 V417 V418 V419 V420 V421 V422 V423 V424 V425 V426 V427 V428 V429 V430 V431 V432 V433 V434 V435 V436 V437 V438 V439 V440 V441 V442 V443 V444 V445 V446 V447 V448 V449 V450 V451 V452 V453 V454 V455 V456 V457 V458 V459 V460 V461 V462 V463 V464 V465 V466 V467 V468 V469 V470 V471 V472 V473 V474 V475 V476 V477 V478 V479 V480 V481 V482 V483 V484 V485 V486 V487 V488 V489 V490 V491 V492 V493 V494 V495 V496 V497 V498 V499 V500 V501 V502 V503 V504 V505 V506 V507 V508 V509 V510 V511 V512 V513 V514 V515 V516 V517 V518 V519 V520 V521 V522 V523 V524 V525 V526 V527 V528 V529 V530 V531 V532 V533 V534 V535 V536 V537 V538 V539 V540 V541 V542 V543 V544 V545 V546 V547 V548 V549 V550 V551 V552 V553 V554 V555 V556 V557 V558 V559 V560 V561 V562 V563 V564 V565 V566 V567 V568 V569 V570 V571 V572 V573 V574 V575 V576 V577 V578 V579 V580 V581 V582 V583 V584 V585 V586 V587 V588 V589 V590 V591 V592 V593 V594 V595 V596 V597 V598 V599 V600 V601 V602 V603 V604 V605 V606 V607 V608 V609 V610 V611 V612 V613 V614 V615 V616 V617 V618 V619 V620 V621 V622 V623 V624 V625 V626 V627 V628 V629 V630 V631 V632 V633 V634 V635 V636 V637 V638 V639 V640 V641 V642 V643 V644 V645 V646 V647 V648 V649 V650 V651 V652 V653 V654 V655 V656 V657 V658 V659 V660 V661 V662 V663 V664 V665 V666 V667 V668 V669 V670 V671 V672 V673 V674 V675 V676 V677 V678 V679 V680 V681 V682 V683 V684 V685 V686 V687 V688 V689 V690 V691 V692 V693 V694 V695 V696 V697 V698 V699 V700 V701 V702 V703 V704 V705 V706 V707 V708 V709 V710 V711 V712 V713 V714 V715 V716 V717 V718 V719 V720 V721 V722 V723 V724 V725 V726 V727 V728 V729 V730 V731 V732 V733 V734 V735 V736 V737 V738 V739 V740 V741 V742 V743 V744 V745 V746 V747 V748 V749 V750 V751 V752 V753 V754 V755 V756 V757 V758 V759 V760 V761 V762 V763 V764 V765 V766 V767 V768 V769 V770 V771 V772 V773 V774 V775 V776 V777 V778 V779 V780 V781 V782 V783 V784 V785 V786 V787 V788 V789 V790 V791 V792 V793 V794 V795 V796 V797 V798 V799 V800 V801 V802 V803 V804 V805 V806 V807 V808 V809 V810 V811 V812 V813 V814 V815 V816 V817 V818 V819 V820 V821 V822 V823 V824 V825 V826 V827 V828 V829 V830 V831 V832 V833 V834 V835 V836 V837 V838 V839 V840 V841 V842 V843 V844 V845 V846 V847 V848 V849 V850 V851 V852 V853 V854 V855 V856 V857 V858 V859 V860 V861 V862 V863 V864 V865 V866 V867 V868 V869 V870 V871 V872 V873 V874 V875 V876 V877 V878 V879 V880 V881 V882 V883 V884 V885 V886 V887 V888 V889 V890 V891 V892 V893 V894 V895 V896 V897 V898 V899 V900 V901 V902 V903 V904 V905 V906 V907 V908 V909 V910 V911 V912 V913 V914 V915 V916 V917 V918 V919 V920 V921 V922 V923 V924 V925 V926 V927 V928 V929 V930 V931 V932 V933 V934 V935 V936 V937 V938 V939 V940 V941 V942 V943 V944 V945 V946 V947 V948 V949 V950 V951 V952 V953 V954 V955 V956 V957 V958 V959 V960 V961 V962 V963 V964 V965 V966 V967 V968 V969 V970 V971 V972 V973 V974 V975 V976 V977 V978 V979 V980 V981 V982 V983 V984 V985 V986 V987 V988 V989 V990 V991 V992 V993 V994 V995 V996 V997 V998 V999 V1000 V1001 V1002 V1003 V1004 V1005 V1006 V1007 V1008 V1009 V1010 V1011 V1012 V1013 V1014 V1015 V1016 V1017 V1018 V1019 V1020 V1021 V1022 V1023 V1024 V1025 V1026 V1027 V1028 V1029 V1030 V1031 V1032 V1033 V1034 V1035 V1036 V1037 V1038 V1039 V1040 V1041 V1042 V1043 V1044 V1045 V1046 V1047 V1048 V1049 V1050 V1051 V1052 V1053 V1054 V1055 V1056 V1057 V1058 V1059 V1060 V1061 V1062 V1063 V1064 V1065 V1066 V1067 V1068 V1069 V1070 V1071 V1072 V1073 V1074 V1075 V1076 V1077 V1078 V1079 V1080 V1081 V1082 V1083 V1084 V1085 V1086 V1087 V1088 V1089 V1090 V1091 V1092 V1093 V1094 V1095 V1096 V1097 V1098 V1099 V1100 V1101 V1102 V1103 V1104 V1105 V1106 V1107 V1108 V1109 V1110 V1111 V1112 V1113 V1114 V1115 V1116 V1117 V1118 V1119 V1120 V1121 V1122 V1123 V1124 V1125 V1126 V1127 V1128 V1129 V1130 V1131 V1132 V1133 V1134 V1135 V1136 V1137 V1138 V1139 V1140 V1141 V1142 V1143 V1144 V1145 V1146 V1147 V1148 V1149 V1150 V1151 V1152 V1153 V1154 V1155 V1156 V1157 V1158 V1159 V1160 V1161 V1162 V1163 V1164 V1165 V1166 V1167 V1168 V1169 V1170 V1171 V1172 V1173 V1174 V1175 V1176 V1177 V1178 V1179 V1180 V1181 V1182 V1183 V1184 V1185 V1186 V1187 V1188 V1189 V1190 V1191 V1192 V1193 V1194 V1195 V1196 V1197 V1198 V1199 V1200 V1201 V1202 V1203 V1204 V1205 V1206 V1207 V1208 V1209 V1210 V1211 V1212 V1213 V1214 V1215 V1216 V1217 V1218 V1219 V1220 V1221 V1222 V1223 V1224 V1225 V1226 V1227 V1228 V1229 V1230 V1231 V1232 V1233 V1234 V1235 V1236 V1237 V1238 V1239 V1240 V1241 V1242 V1243 V1244 V1245 V1246 V1247 V1248 V1249 V1250 V1251 V1252 V1253 V1254 V1255 V1256 V1257 V1258 V1259 V1260 V1261 V1262 V1263 V1264 V1265 V1266 V1267 V1268 V1269 V1270 V1271 V1272 V1273 V1274 V1275 V1276 V1277 V1278 V1279 V1280 V1281 V1282 V1283 V1284 V1285 V1286 V1287 V1288 V1289 V1290 V1291 V1292 V1293 V1294 V1295 V1296 V1297 V1298 V1299 V1300 V1301 V1302 V1303 V1304 V1305 V1306 V1307 V1308 V1309 V1310 V1311 V1312 V1313 V1314 V1315 V1316 V1317 V1318 V1319 V1320 V1321 V1322 V1323 V1324 V1325 V1326 V1327 V1328 V1329 V1330 V1331 V1332 V1333 V1334 V1335 V1336 V1337 V1338 V1339 V1340 V1341 V1342 V1343 V1344 V1345 V1346 V1347 V1348 V1349 V1350 V1351 V1352 V1353 V1354 V1355 V1356 V1357 V1358 V1359 V1360 V1361 V1362 V1363 V1364 V1365 V1366 V1367 V1368 V1369 V1370 V1371 V1372 V1373 V1374 V1375 V1376 V1377 V1378 V1379 V1380 V1381 V1382 V1383 V1384 V1385 V1386 V1387 V1388 V1389 V1390 V1391 V1392 V1393 V1394 V1395 V1396 V1397 V1398 V1399 V1400 V1401 V1402 V1403 V1404 V1405 V1406 V1407 V1408 V1409 V1410 V1411 V1412 V1413 V1414 V1415 V1416 V1417 V1418 V1419 V1420 V1421 V1422 V1423 V1424 V1425 V1426 V1427 V1428 V1429 V1430 V1431 V1432 V1433 V1434 V1435 V1436 V1437 V1438 V1439 V1440 V1441 V1442 V1443 V1444 V1445 V1446 V1447 V1448 V1449 V1450 V1451 V1452 V1453 V1454 V1455 V1456 V1457 V1458 V1459 V1460 V1461 V1462 V1463 V1464 V1465 V1466 V1467 V1468 V1469 V1470 V1471 V1472 V1473 V1474 V1475 V1476 V1477 V1478 V1479 V1480 V1481 V1482 V1483 V1484 V1485 V1486 V1487 V1488 V1489 V1490 V1491 V1492 V1493 V1494 V1495 V1496 V1497 V1498 V1499 V1500 V1501 V1502 V1503 V1504 V1505 V1506 V1507 V1508 V1509 V1510 V1511 V1512 V1513 V1514 V1515 V1516 V1517 V1518 V1519 V1520 V1521 V1522 V1523 V1524 V1525 V1526 V1527 V1528 V1529 V1530 V1531 V1532 V1533 V1534 V1535 V1536 V1537 V1538 V1539 V1540 V1541 V1542 V1543 V1544 V1545 V1546 V1547 V1548 V1549 V1550 V1551 V1552 V1553 V1554 V1555 V1556 V1557 V1558 V1559 V1560 V1561 V1562 V1563 V1564 V1565 V1566 V1567 V1568 V1569 V1570 V1571 V1572 V1573 V1574 V1575 V1576 V1577 V1578 V1579 V1580 V1581 V1582 V1583 V1584 V1585 V1586 V1587 V1588 V1589 V1590 V1591 V1592 V1593 V1594 V1595 V1596 V1597 V1598 V1599 V1600 V1601 V1602 V1603 V1604 V1605 V1606 V1607 V1608 V1609 V1610 V1611 V1612 V1613 V1614 V1615 V1616 V1617 V1618 V1619 V1620 V1621 V1622 V1623 V1624 V1625 V1626 V1627 V1628 V1629 V1630 V1631 V1632 V1633 V1634 V1635 V1636 V1637 V1638 V1639 V1640 V1641 V1642 V1643 V1644 V1645 V1646 V1647 V1648 V1649 V1650 V1651 V1652 V1653 V1654 V1655 V1656 V1657 V1658 V1659 V1660 V1661 V1662 V1663 V1664 V1665 V1666 V1667 V1668 V1669 V1670 V1671 V1672 V1673 V1674 V1675 V1676 V1677 V1678 V1679 V1680 V1681 V1682 V1683 V1684 V1685 V1686 V1687 V1688 V1689 V1690 V1691 V1692 V1693 V1694 V1695 V1696 V1697 V1698 V1699 V1700 V1701 V1702 V1703 V1704 V1705 V1706 V1707 V1708 V1709 V1710 V1711 V1712 V1713 V1714 V1715 V1716 V1717 V1718 V1719 V1720 V1721 V1722 V1723 V1724 V1725 V1726 V1727 V1728 V1729 V1730 V1731 V1732 V1733 V1734 V1735 V1736 V1737 V1738 V1739 V1740 V1741 V1742 V1743 V1744 V1745 V1746 V1747 V1748 V1749 V1750 V1751 V1752 V1753 V1754 V1755 V1756 V1757 V1758 V1759 V1760 V1761 V1762 V1763 V1764 V1765 V1766 V1767 V1768 V1769 V1770 V1771 V1772 V1773 V1774 V1775 V1776 V1777 V1778 V1779 V1780 V1781 V1782 V1783 V1784 V1785 V1786 V1787 V1788 V1789 V1790 V1791 V1792 V1793 V1794 V1795 V1796 V1797 V1798 V1799 V1800 V1801 V1802 V1803 V1804 V1805 V1806 V1807 V1808 V1809 V1810 V1811 V1812 V1813 V1814 V1815 V1816 V1817 V1818 V1819 V1820 V1821 V1822 V1823 V1824 V1825 V1826 V1827 V1828 V1829 V1830 V1831 V1832 V1833 V1834 V1835 V1836 V1837 V1838 V1839 V1840 V1841 V1842 V1843 V1844 V1845 V1846 V1847 V1848 V1849 V1850 V1851 V1852 V1853 V1854 V1855 V1856 V1857 V1858 V1859 V1860 V1861 V1862 V1863 V1864 V1865 V1866 V1867 V1868 V1869 V1870 V1871 V1872 V1873 V1874 V1875 V1876 V1877 V1878 V1879 V1880 V1881 V1882 V1883 V1884 V1885 V1886 V1887 V1888 V1889 V1890 V1891 V1892 V1893 V1894 V1895 V1896 V1897 V1898 V1899 V1900 V1901 V1902 V1903 V1904 V1905 V1906 V1907 V1908 V1909 V1910 V1911 V1912 V1913 V1914 V1915 V1916 V1917 V1918 V1919 V1920 V1921 V1922 V1923 V1924 V1925 V1926 V1927 V1928 V1929 V1930 V1931 V1932 V1933 V1934 V1935 V1936 V1937 V1938 V1939 V1940 V1941 V1942 V1943 V1944 V1945 V1946 V1947 V1948 V1949 V1950 V1951 V1952 V1953 V1954 V1955 V1956 V1957 V1958 V1959 V1960 V1961 V1962 V1963 V1964 V1965 V1966 V1967 V1968 V1969 V1970 V1971 V1972 V1973 V19	

TEAC

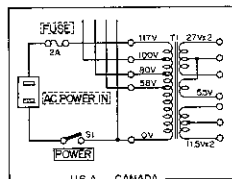
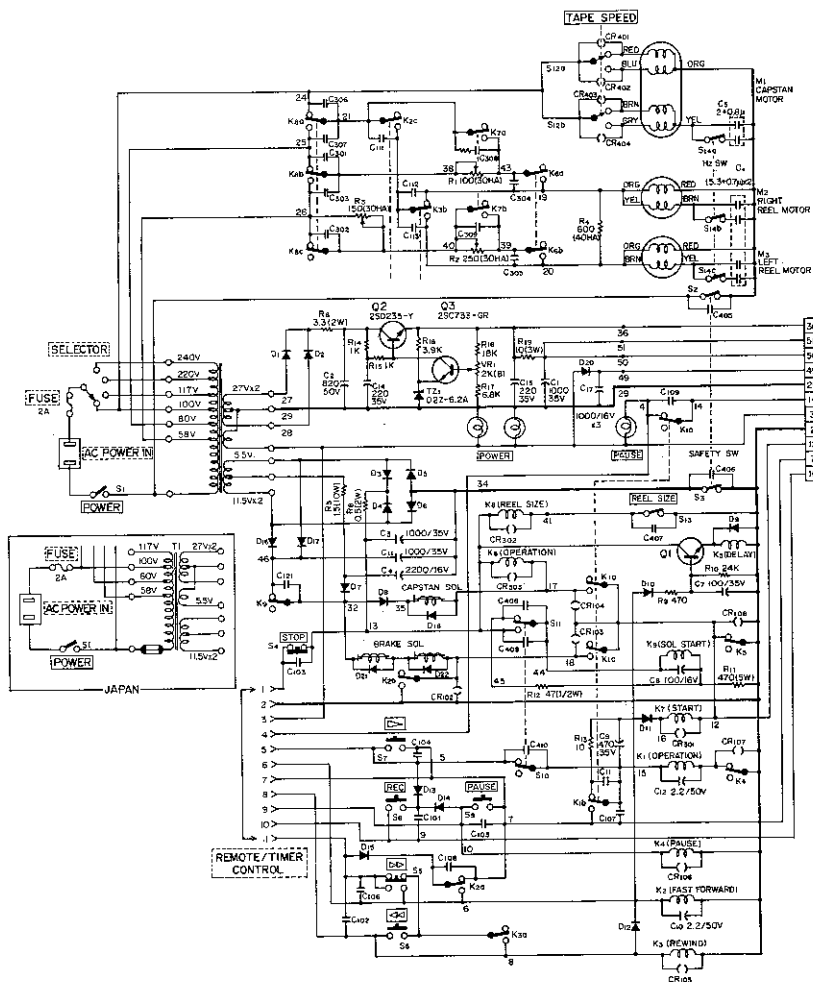
A-3340S TAPE DECK

CONDENSED ELECTRICAL PROCEDURE

[illegible]

Relationship between decibels, currents, voltage and power ratios

2	1	0037	B0C	4	8	85C	955	3	08	8	1841	174	4	30	12	9	2512	198	8	30	16	4	1395	6	510	8	65
1	0040	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0041	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0042	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0043	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0044	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
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1	0050	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
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1	0052	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0053	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0054	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0055	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0056	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0057	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0058	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0059	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0060	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
2	1	0061	518	12	8	9128	708	18	10	9	2511	817	8	13	10	2744	184	10	10	17	4	1737	7	870	10	85	
1	0062	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0063	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0064	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0065	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0066	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0067	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
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1	0069	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
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1	0073	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0074	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0075	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0076	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
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1	0082	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
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1	0092	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0093	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
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1	0095	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0096	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0097	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0098	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0099	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0100	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
2	1	0101	518	12	8	9128	708	18	10	9	2511	817	8	13	10	2744	184	10	10	17	4	1737	7	870	10	85	
1	0102	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0103	431	67	1	1	8707	464	05	1	1	7595	181	30	1	1	4894	476	2	2	1	1	1	1	1	1	1	
1	0104	431	67	1	1	870																					

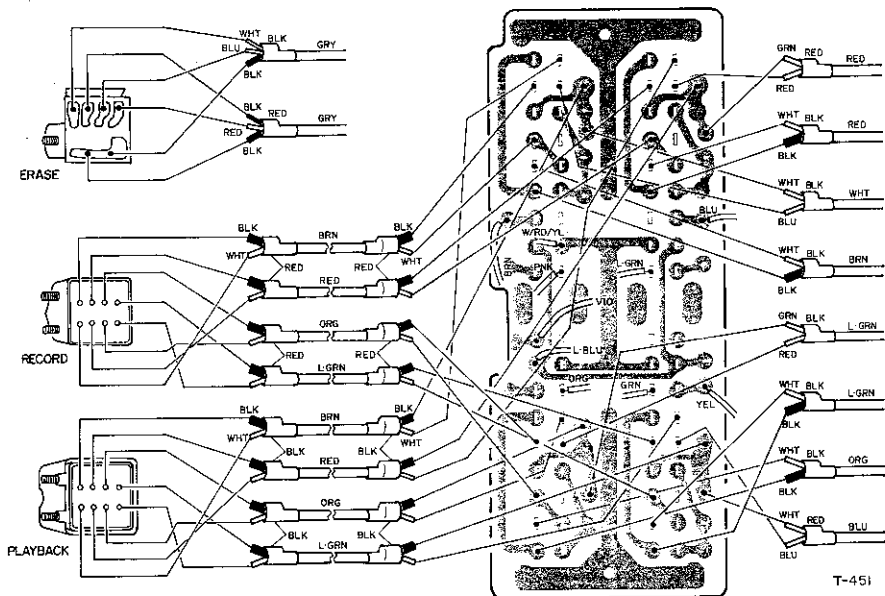


- D1-D6: S1801-02
 D7-D8: S1801-06
 D9-D10: S1801-02
 D11: S1801-06
 D12: S1801-02
 D13-D14: S1801-06

NOTES

- SCHEMATIC DIAGRAM SHOWN IN THE STOP MODE
 TAPE SPEED SWITCH SHOWN IN THE HIGH POSITION.
 FREQUENCY CONVERSION SWITCH SHOWN IN THE 50 HZ POSITION.
 [] : ON FRONT PANEL
 [] : ON REAR PANEL
 [] : SPARK KILLER 0.1120/400W
 [] : SCREWDRIVER ADJUSTMENT
 [] : 0.1/400W

TAPE TRANSPORT			
MODEL NO.			
REV.			
1	02	75	E-760
TEAC CORPORATION			



NOTE

Note color coding of wires to head and then unsolder these wires.
During removal or replacement of head, use caution not to overheat terminals on head as this may cause head problems.