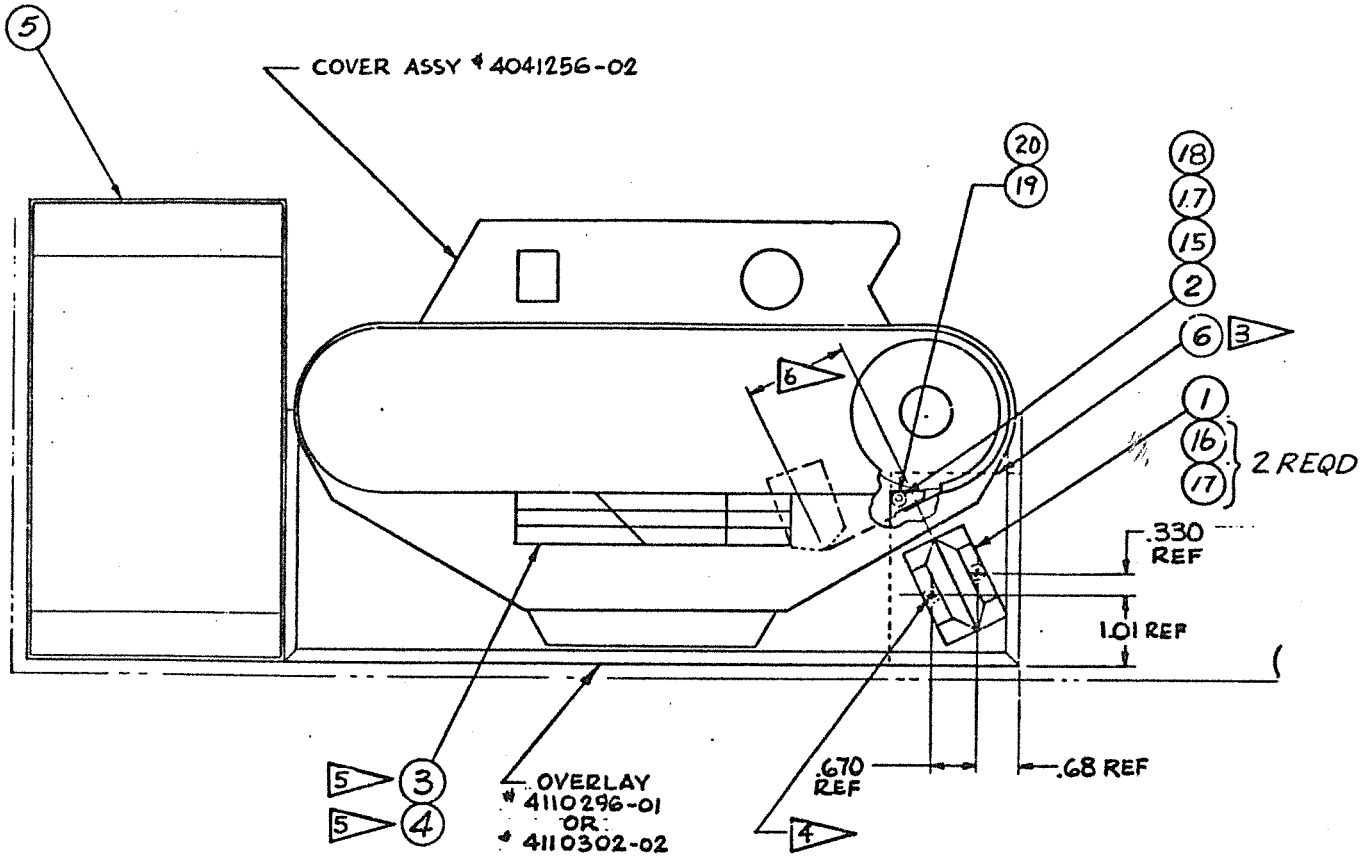


NOTES:

1. PART NO. IS 4010292-XX
2. MARK PART NO. PER BDI-1.
3. TEMPLATE TO BE PLACED ON FARSIDE OF OVERLAY USING ITEM #19 AND #20 FOR DRILLING HOLES FOR ITEM #1.
4. ON OVERLAY PART #4110296-01 DRILL 2 HOLES .156 DIA. THRU, CBORE .312 DIA. X .16 DEEP, FARSIDE.
   ON OVERLAY PART #4110302-02 DRILL 2 HOLES .156 DIA THRU.
5. BOND ITEM 3 OR 4 TO COVER AS SHOWN.
6. ALIGN ITEM 1, MARKING BLOCK "V", 1.50 IN. FROM THE PLAY HEAD GAP.

Assembly No. 4010292. Edit Kit

SECTION 7
ATR-100

TRANSISTOR INSULATORS

Initial production of the ATR-100 used silicone rubber insulators under the power transistors on the transport casting. They were susceptible to physical damage and were marginal in heat transfer. Whenever a transistor needs to be replaced, the insulator should be changed to Ampex Part Number 580-445. Dow Corning heatsink compound number DC340, Ampex Part Number 087-388, should also be used.

AUDIO CONTROL PWA IMPROVEMENT

To improve the slow start up exhibited by some 5.1840 MHz crystals, perform the following modifications to PWA 4050788-04.

1. Change R2 from an 820-ohm resistor to a 680-ohm ceramic film resistor, 1/4W, 5%, Ampex Part Number 066-840.
2. Change C1 from a 33-pF to 100-pF capacitor, 500V, 5%, Ampex Part Number 034-177.
3. A symptom of this condition is that when power is applied to the ATR-100, the lights on the control unit come on in random fashion, instead of indicating the reproduce and safe modes.
4. Correct schematic number 4840398 accordingly.

I/O MODULE INTERFERENCE

There have been some instances of interference between the I/O module and the main frame casting such as to prevent engagement of the captive holddown screw in the I/O module and the threaded hole in the main frame. This interference is generally caused by the uppermost corners of the I/O module chassis digging into the corners of the main frame. To rectify this problem, use a flat file to produce a 45° chamfer, approximately 3/16-inch long, on the corners of the chassis as shown in Figure 7-1. (Shield critical areas from filings.)

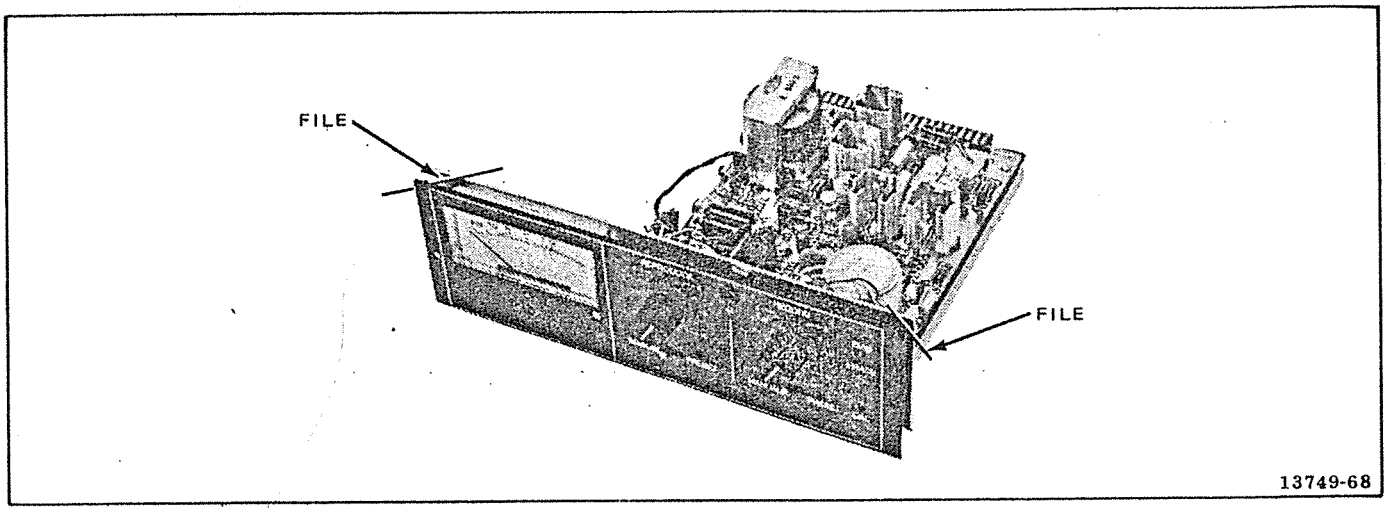


Figure 7-1. I/O Module

SECTION 9
ATR-100

NEW POWER SUPPLY AND DYNAMIC BRAKE PWA

All ATR-100 power supplies will soon have a new power supply and dynamic brake PWA (P/N 4050882-XX). This new PWA, which is completely interchangeable with the earlier version (P/N 4050794-XX), has improved +5V dc current rating so as to facilitate adding accessories. (Refer to Schematic 4840458.)

CASTER REPLACEMENT KIT

The original casters shipped with the pedestal assembly were found to be too light for the load imposed by the ATR-100. They were also extremely difficult to install or remove.

A replacement kit (P/N 4010185-XX) is now available which includes the new caster plus mounting hardware. Ordering the caster called out in the 4890407-01 ATR-100 Operation and Maintenance manual will ensure you receive the appropriate caster and mounting hardware.

Old Caster	Caster Kit
Without Brake - 082-066	4010285-01 - Without Brake
With Brake - 082-065	4010285-02 - With Brake

TAPE TIMER WHEEL (BEARING REPLACEMENT) 4041230-XX

The ATR-100 tape timer wheel bearings periodically need replacing due to the tight run-out specs. The bearings are pressed in at the factory and are difficult to remove or install without damaging the wheel itself or the replacement bearing. The tools described in this instruction (Figure 9-1), when used as directed, will facilitate the removal and installation of the bearing without damage to either the aluminum wheel or the bearing race. Proceed as follows:

NOTE

The use of the arbor press and the soft-noise hammer for bearing installation is not recommended as the bearing or the timer wheel may be damaged. Replacement of the bearings in this manner should only be attempted as a last resort.

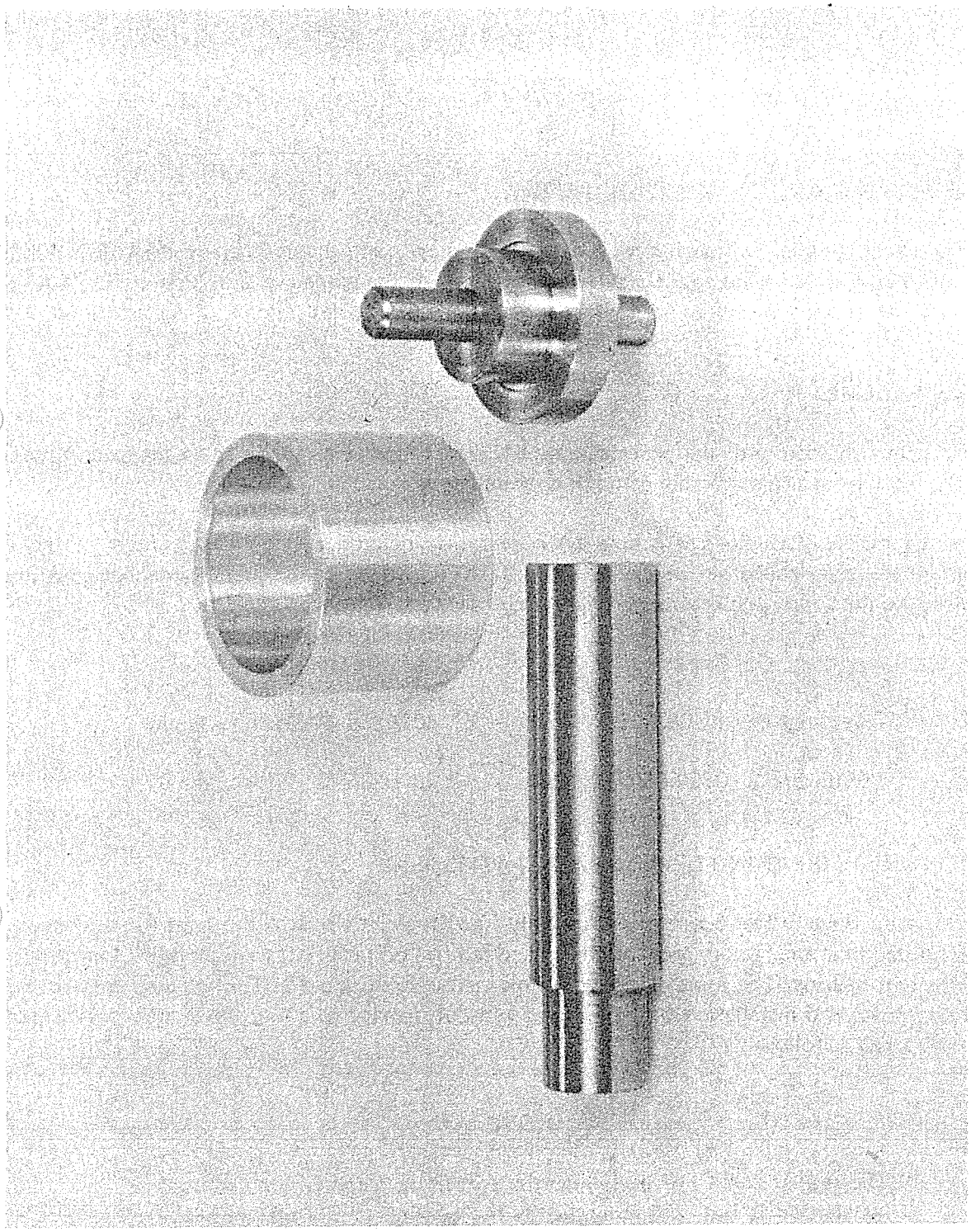


Figure 9-1. Tools Described in Instruction

Bearing Removal

1. Using A Drill Press

   "Chuck" the 1/2 inch diameter end on the 2-1/2 inch long bearing remover, and tighten. Make sure that the wheel assembly is perpendicular to the tool and the base of the wheel is supported by the support ring (page 9-7). Lower the chuck with the bearing remover (see Figure 9-2) and gently push the bearing out through the bottom.

2. Using an Arbor Press

   As with the drill press method, the wheel assembly must be supported with the support ring. Because there is no check on the arbor press, the bearing remover must be aligned by eye, perpendicular to the bearing. Gently push the bearing out through the bottom.

3. Using a Soft-Nose Hammer

   Using the support ring, insert the bearing at the top and gently tap until the bearings clear the bottom.

Bearing Installation

1. Using a Drill Press

   Chuck the bearing seating tool (page 9-8) into the drill with the one inch surface facing down toward the tape timer wheel (see Figure 9-3). Place the bearing on the 1/4 inch shaft portion of the tool, lightly holding it against the flat portion of the tool. This insures that the bearing will enter the wheel bore without being cocked. Lower the chucked tool into the bore and seat the bearing flush with the bottom of the timer wheel. Next, reverse the tool in the chuck and, turning the wheel over with the skirted side down (see Figure 9-4), place a bearing over the shaft as described above. Lower the chucked tool again until the tool bottoms on the one inch flat. This will seat the bearing .280 inch ± 0.002 inch deep.

2. Using an Arbor Press and the Soft-Nose Hammer

   The same principle applies as in using the drill press; however, extreme caution must be used to start the bearing into the bore absolutely straight. Also included are the drawings of the individual piece parts needed for replacement of bearings.

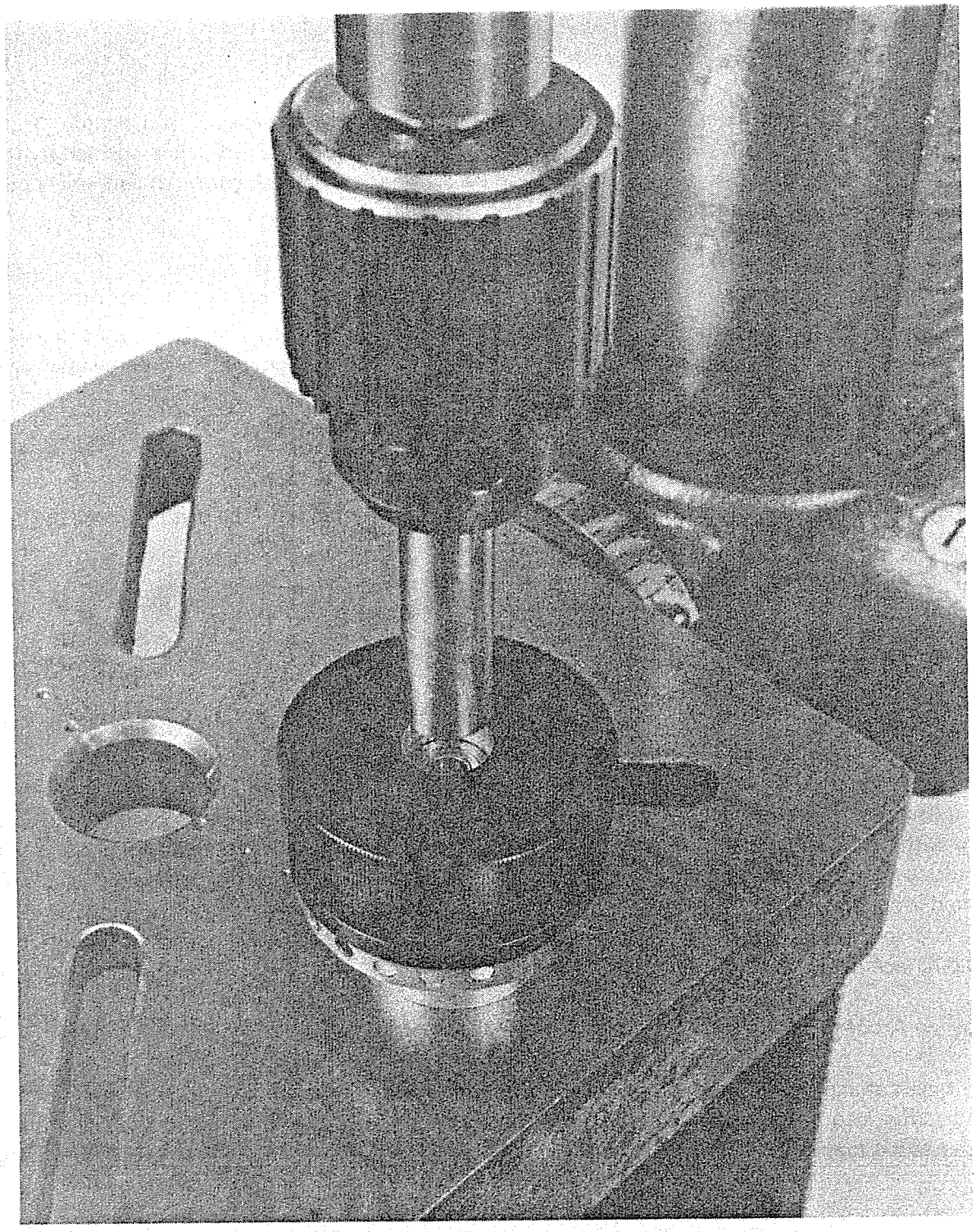


Figure 9-2. Bearing Remover

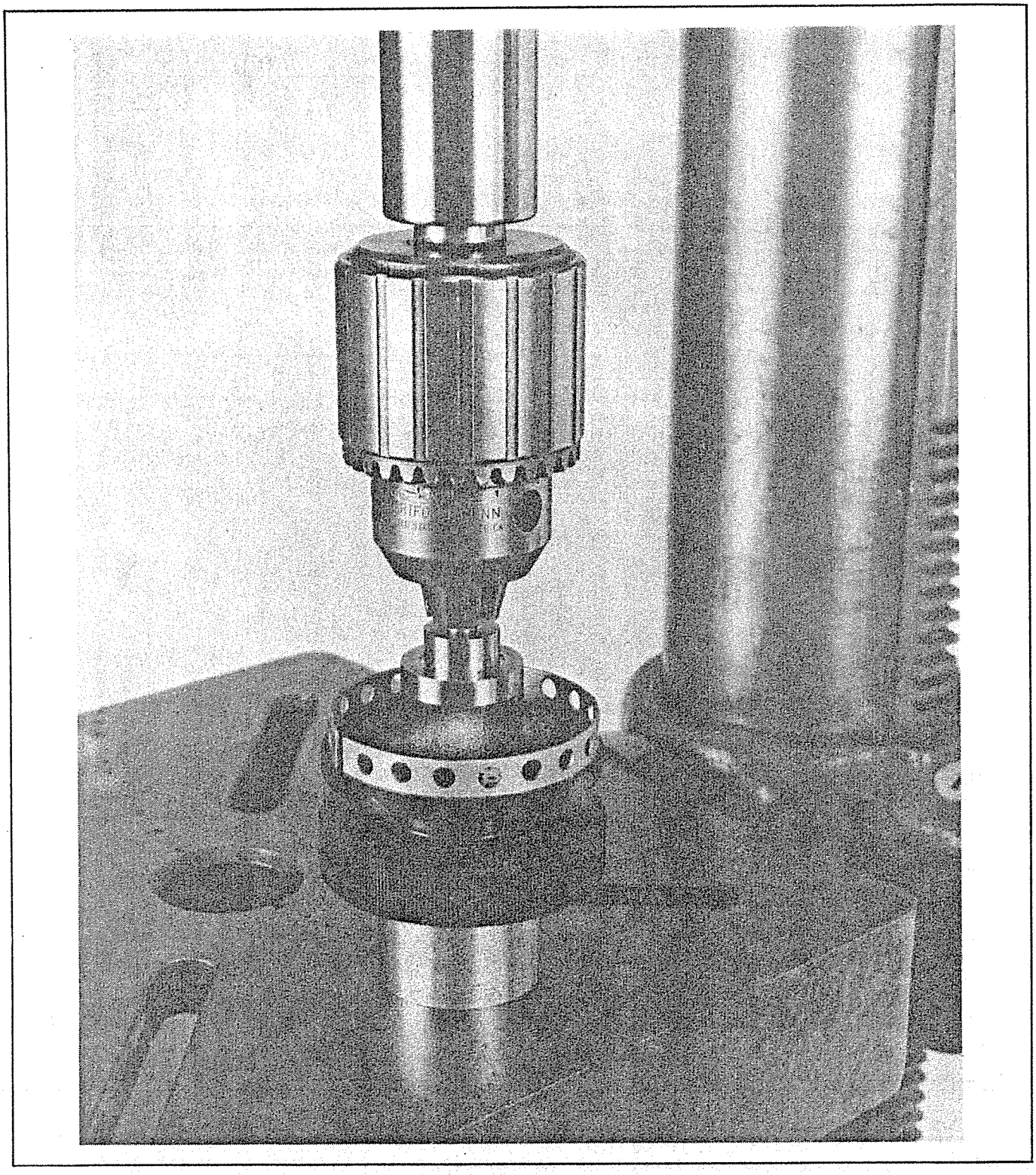


Figure 9-3. Tape Timer Wheel Skirt Side Up

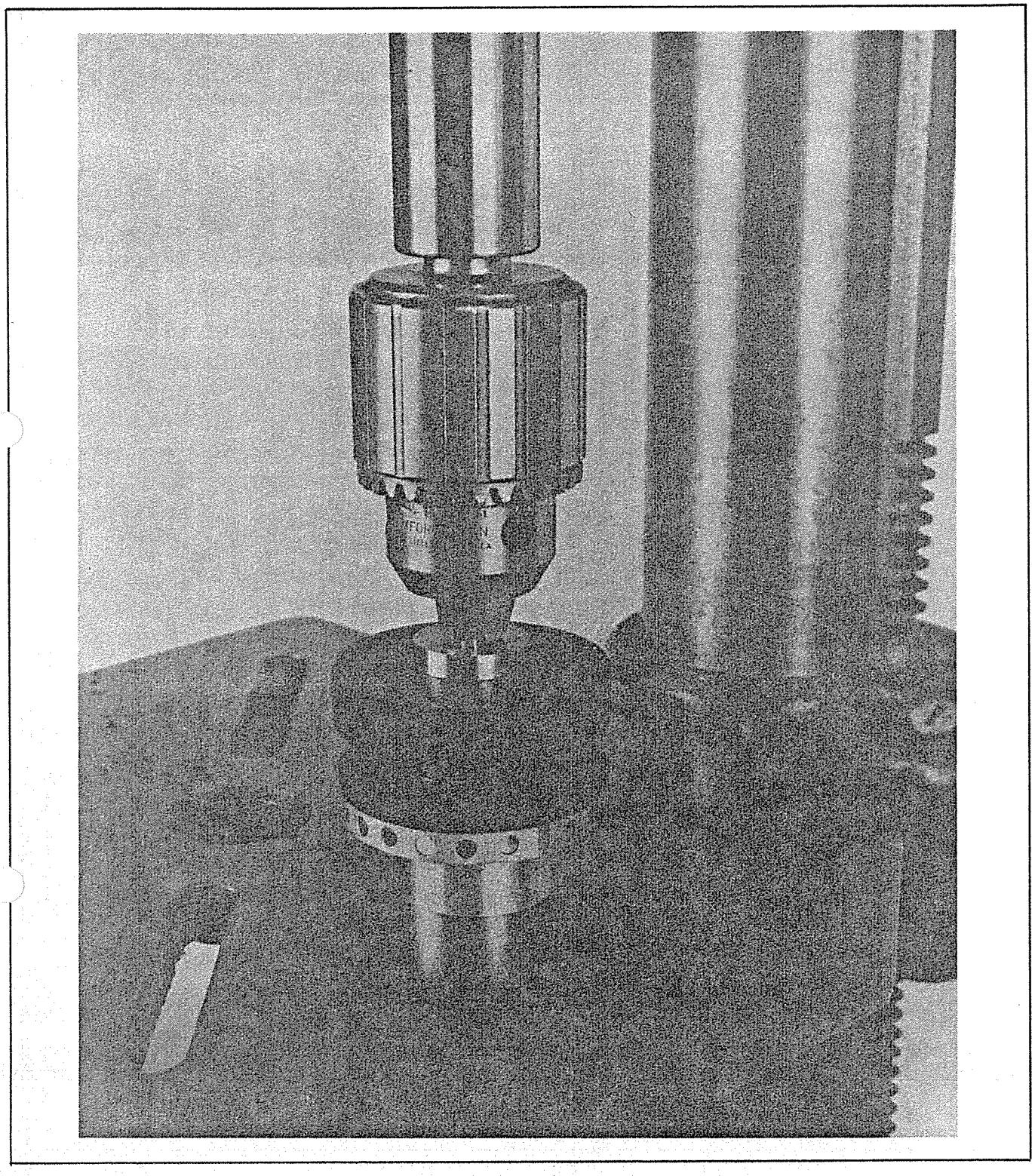
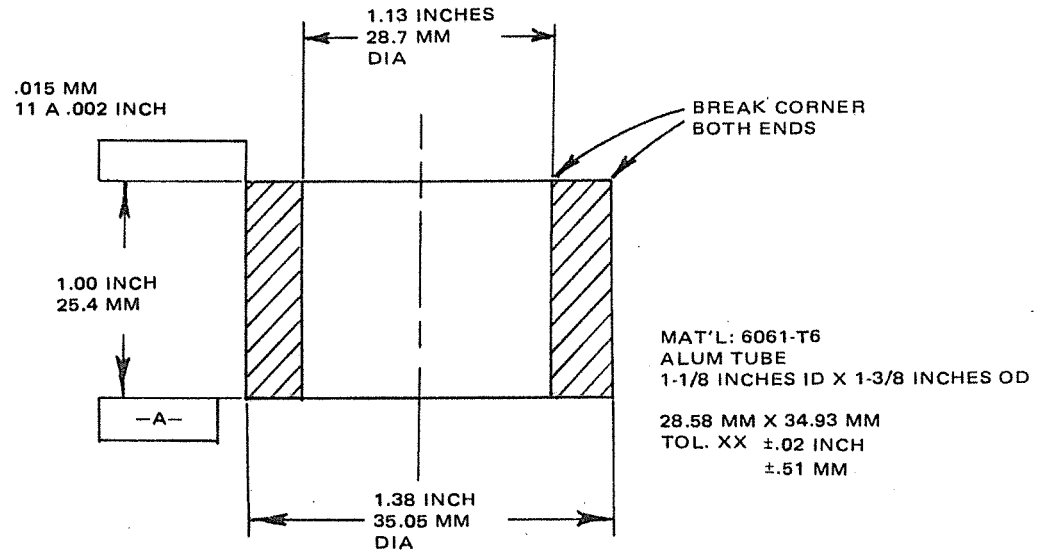
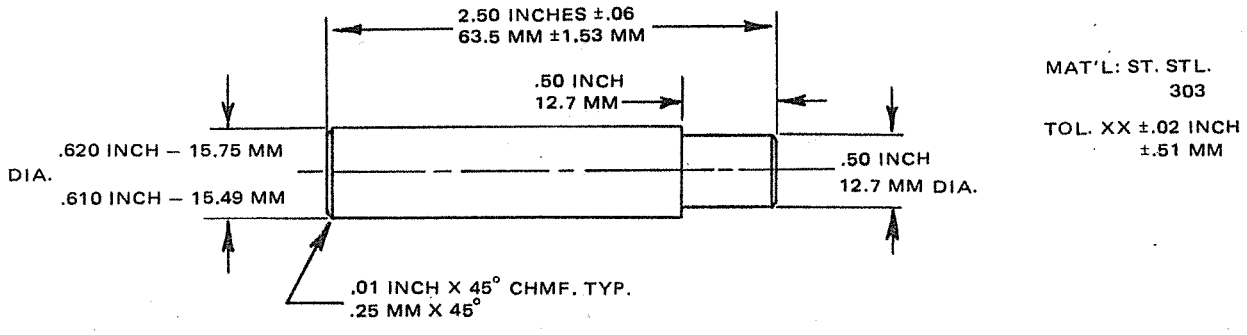


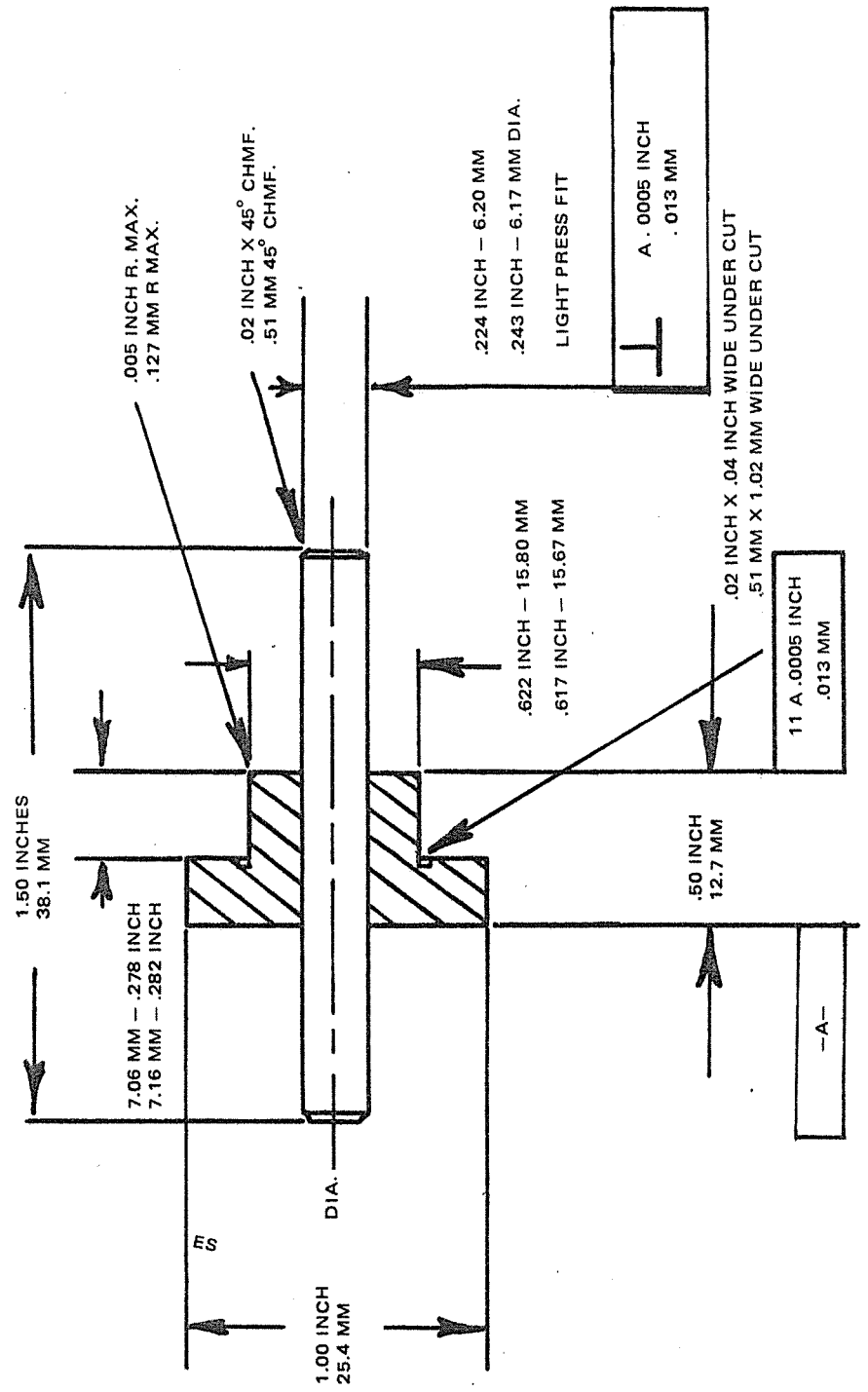
Figure 9-4. Tape Timer Wheel Skirt Side Down



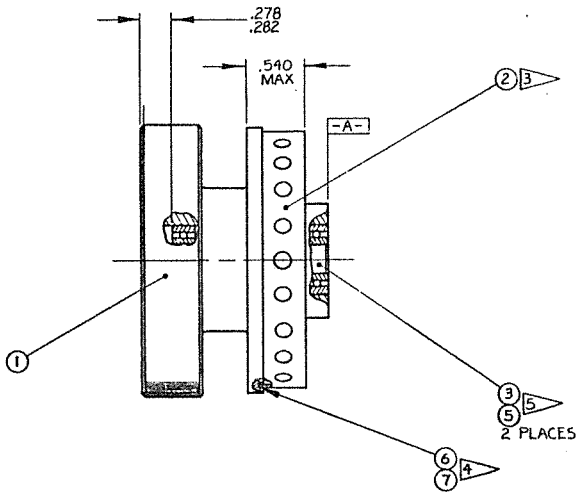
RING – SUPPORT



BEARING REMOVING TOOL



BEARING INSTALLATION TOOL



NOTES:

1. ASSY NO. IS 4041230-01.
2. MARK ASSY NO. PER BDI-1.
3. PREFORM ITEM 2 TO A 2.25 O.D. CIRCULAR FORM BEFORE ASSY.
4. MIX ITEMS 6 AND 7 PER MFG. SPEC. AND APPLY AROUND PERIPHERY. ALLOW TO CURE.
5. APPLY A THIN COAT OF GREASE (ITEM 5) TO BORE. PRESS ONE BEARING TO DIM SHOWN AND OTHER BEARING FLUSH WITH -A- AS SHOWN.
6. A STRAIGHT SHAFT .2497 DIA X 1.50 LONG MUST SLIDE THRU FINISHED ASSEMBLY WITHOUT OBVIOUS BINDING IN BEARING BORES.
7. DO NOT DAMAGE KNURLED SURFACE OF WHEEL.

AR	7	932-044	PLASTIC, LIQUID, EPOXY, HYSOL C9-4210
AR	6	018-290	PLASTIC, LIQUID, CATALYST, HYSOL H2-3561
AR	5	087-754	GREASE, ANDOK "C"
	4		
2	3	4200082-01	BEARING, BALL, R-4, ABEC 5
1	2	4260541-01	BAND, TAPE TIMER
1	1	4250094-01	WHEEL, TAPE TIMER
-ø	ITEM NO	PART NUMBER	DESCRIPTION

Assembly No. 4041230. Tape Timer Wheel Assembly

AMPEX

INSTRUCTIONS

INSTALLATION INSTRUCTIONS

ATR-100 CUE AMPLIFIER

GENERAL

The ATR-100 Cue Amplifier Kit permits operator selection and monitoring of a tape channel or channels during editing operation. The audio can be heard on a speaker (supplied) or on earphones used with the phone jack mounted at the rear of the unit.

DESCRIPTION (See Figure 1)

The ATR-100 Cue Amplifier Kit consists of a cue amplifier assembly (part no. 4020462-01), a cable assembly (part no. 4051008-01), and associated hardware and mounting brackets. Kit 4260635-AA contains equipment for console mounting, while kit 4260635-AB contains parts for rack and portable case mounting.

THEORY OF OPERATION (See Figure 2)

Audio signals from the ATR-100 enter the isolation network on the channel 1 or channel 2 audio lines. The isolation network allows a portion of each audio channel to be routed to the 1 and 2 position of the CHANNEL switch without having crosstalk between the channels. One of three outputs from the isolation network is selected at the CHANNEL switch and routed to the LEVEL control. This signal is fed through the audio amplifier to a speaker or a phone jack. When the headset is utilized the speaker input is automatically disconnected.

INSTALLATION

The ATR-100 cue amplifier kit installation instructions will be divided into two procedures. The first will be instructions on installing the cue amplifier into a portable or rack mounting. The second will cover installation of the cue amplifier in a console.

Portable or Rack Mounting of Cue Amplifier

To install the cue amplifier in a portable or rack-configurated ATR-100 proceed as follows:

1. Insure kit number is 4010319-AB.

AMPEX 4890421-01
ISSUED: MAY 1979

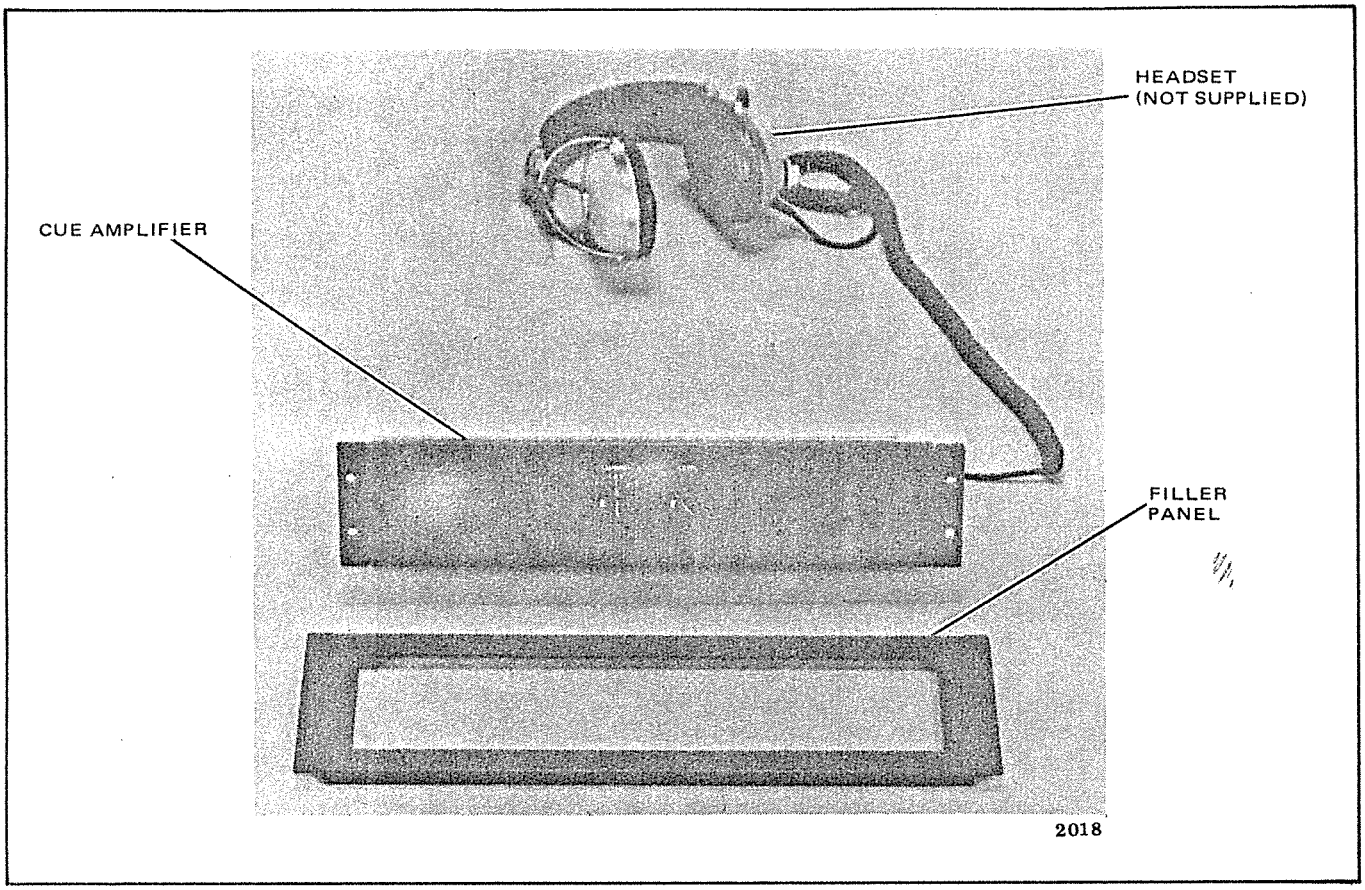


Figure 1. Cue Amplifier with Filler Panel

2. Using four black 8/32 button head screws and four black washers, mount cue amplifier assembly (part no. 4020462-01) in filler panel (part no. 4291046-01) (see Figure 1).

NOTE

On portable installations perform step 3 and on rack-mounted installations perform step 4.

3. On the portable case, remove the 5-1/4-inch filler panel.

4. On the rack-mounted model make a 5-1/4-inch-high space for installation of the cue amplifier.

5. Using four button head 8/32 screws, four washers, and four sheet spring nuts, install cue amplifier and panel assembly in space provided in step 3 or 4.

6. Install cable assembly (part no. 4051008-01) as follows:

   a. On the portable case, open doors for access to transport electronics and cue amplifier back panel.

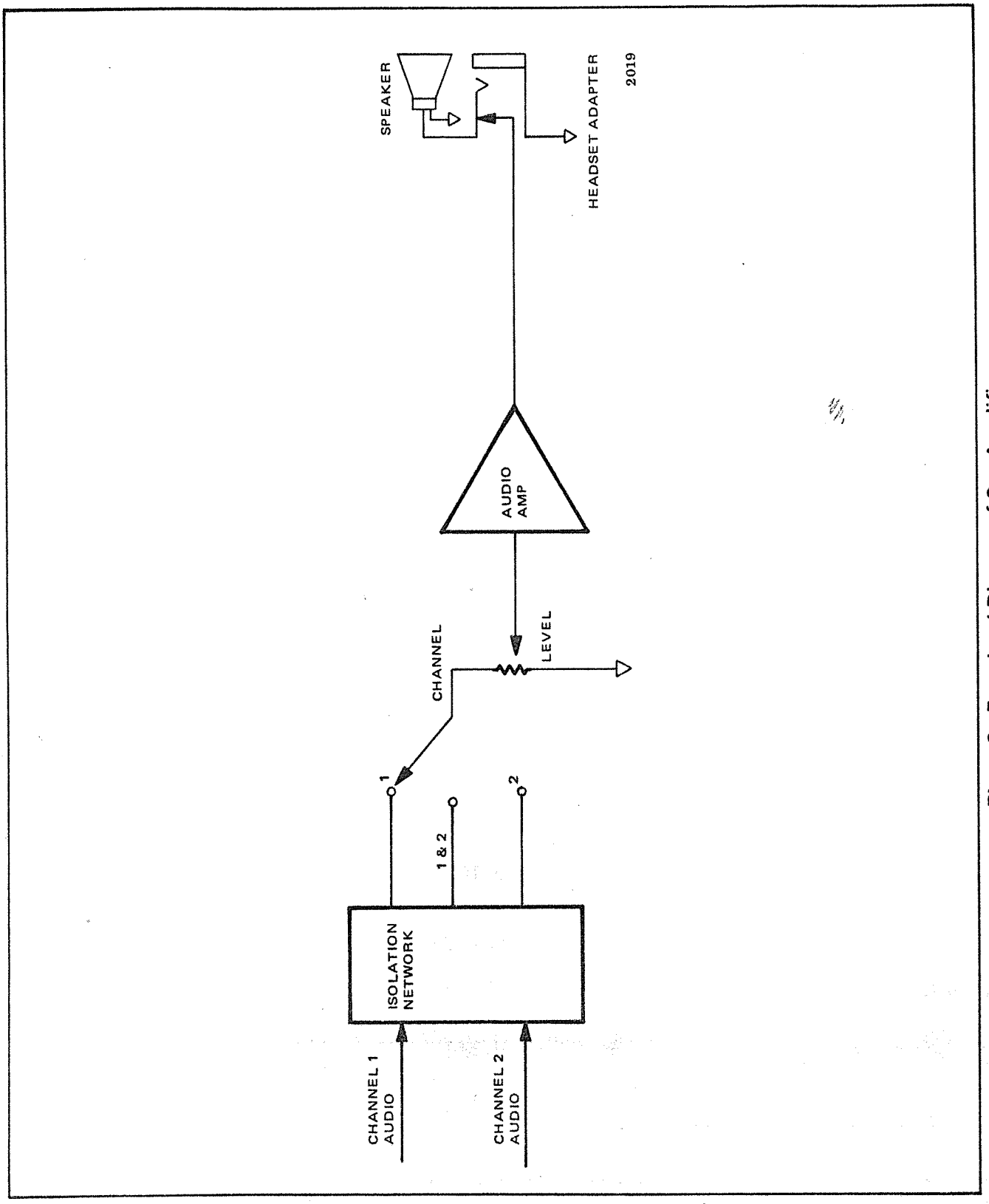


Figure 2. Functional Diagram of Cue Amplifier

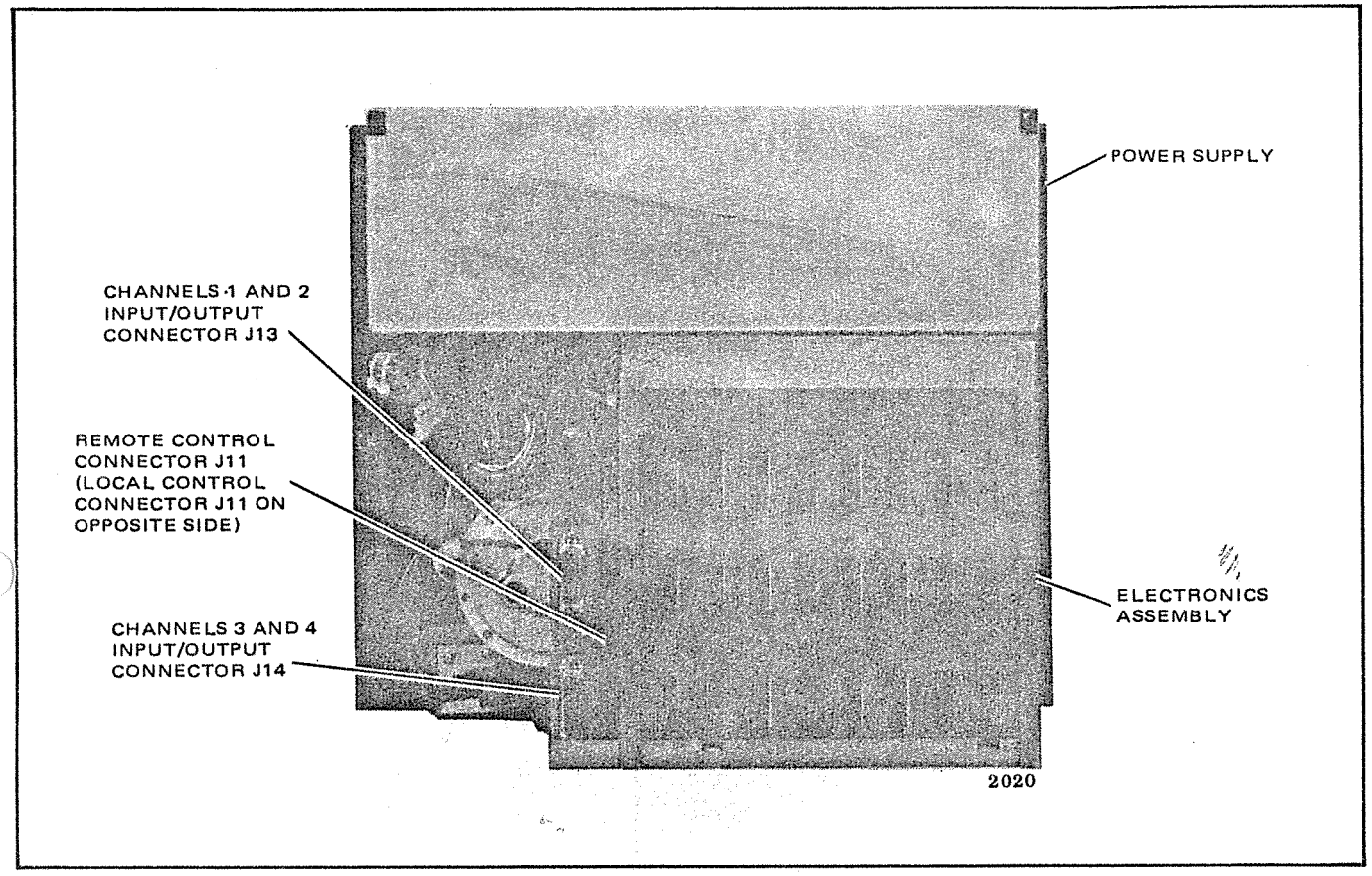


Figure 3. Connector Locations, Bottom View of Recorder/Reproducer

b. On all models disconnect cable from input/output assembly to transport at J13 or J14 on electronics assembly (see Figure 3).

c. Connect plug P1 of cable assembly (part no. 4051008-01) to jacks J13 or J14 on electronics assembly. (Use same plug that was referred to in step 6b.)

d. Connect J1 of cable assembly (part no. 4051008-01) to plug P13/P14 on cable from input/output assembly.

e. Connect P2 of cable assembly (part no. 4051008-01) into J2 on cue amplifier assembly.

Console Mounting of Cue Amplifier

To install the cue amplifier in a console-mounted ATR-100, proceed as follows:

1. Insure kit number is 4010319-AA.
2. Unplug power cable.
3. Remove console filler panel as follows:

a. Remove and save two black button screws and washers at front of filler panel.

b. Loosen input/output module mounting screws (captive) and remove input/output module (see Figure 4).

c. Remove input/output mainframe mounting screws and remove input/output mainframe (see Figure 4).

d. Remove input/output housing (see Figure 4).

e. Remove and save six cap hex 10/32 screws and six washers at the back of filler panel.

f. Remove console filler panel.

4. Reinstall input/output housing, mainframe, and module by reversing procedure followed in step 3, substeps b, c, and d.

5. Install cable assembly (part no. 4051008-01) as follows:

a. On console cabinet open front door for access to electronics cable beneath transport on right side.

b. Disconnect cable from input/output assembly to transport at J13 or J14 on electronics assembly (see Figure 4).

c. Connect plug P1 of cable assembly (part no. 4051008-01) to jacks J13 or J14 on electronics assembly. (Use same plug that was referred to in step 4b.)

d. Connect J1 of cable assembly (part no. 4051008-01) to plug P13/P14 on cable from input/output assembly.

e. Route cable no. 4051008-01, plug P2, out cable hole on rear of compartment.

6. Install panel mounting brackets 4260635-AA (left) and 4260635-AB (right) using six cap hex 10/32 screws and washers removed in step 3e (mount in area where console filler panel was previously installed).

7. Install filler panel (part no. 4291045-01) using two 8/32 screws and washers supplied and two 10/32 button head screws and washers saved in step 3e.

NOTE

Panel mounting brackets may be realigned for a satisfactory fit.

8. Install cue amplifier assembly (part no. 4020462) above filler panel using four 8/32 button head screws and four washers supplied with kit.

9. Connect P2 of cable assembly (part no. 4051008) into cue amplifier assembly at J2.

10. Installation is complete (see Figure 5).

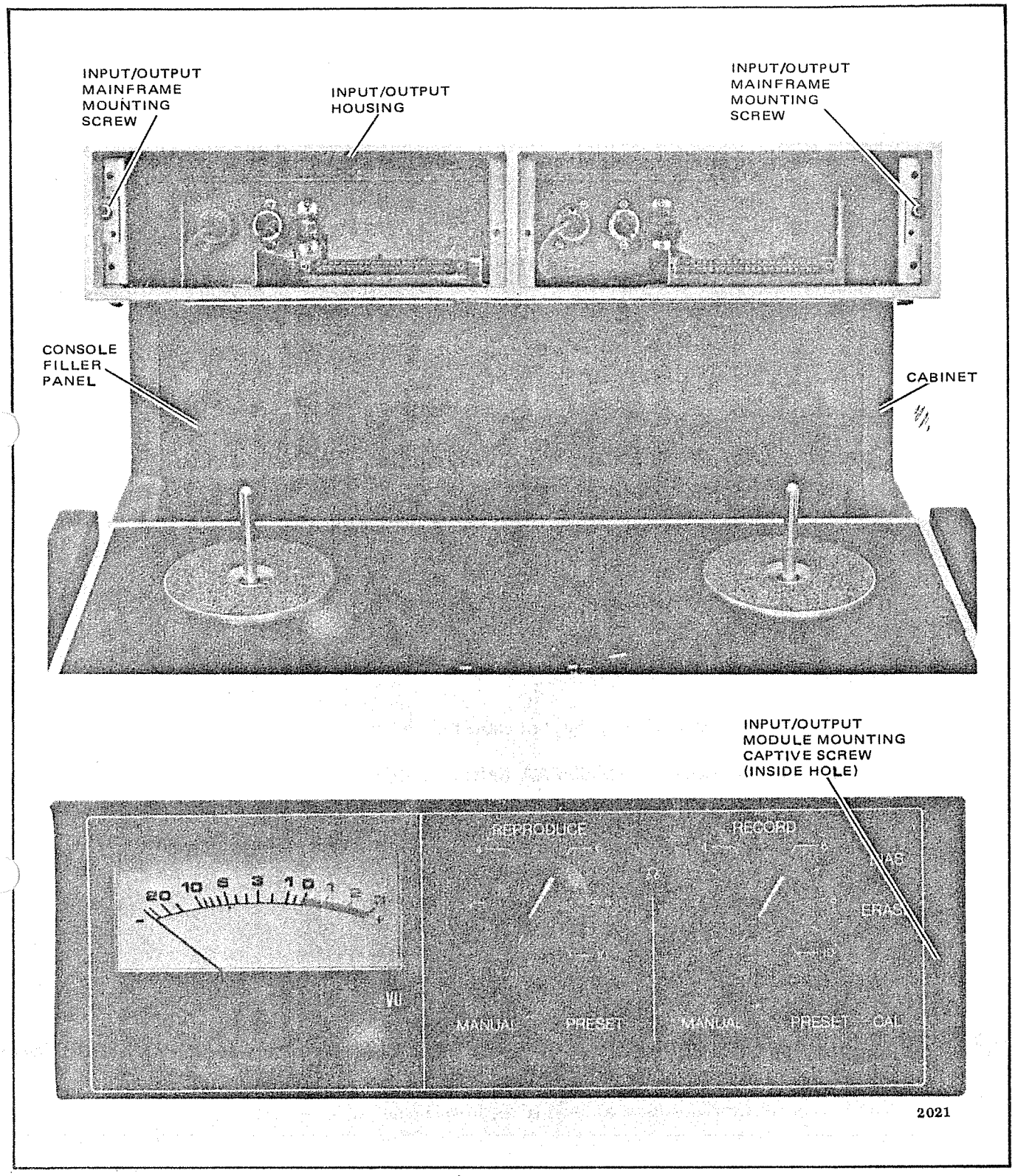


Figure 4. Input/Output Assembly Mounting

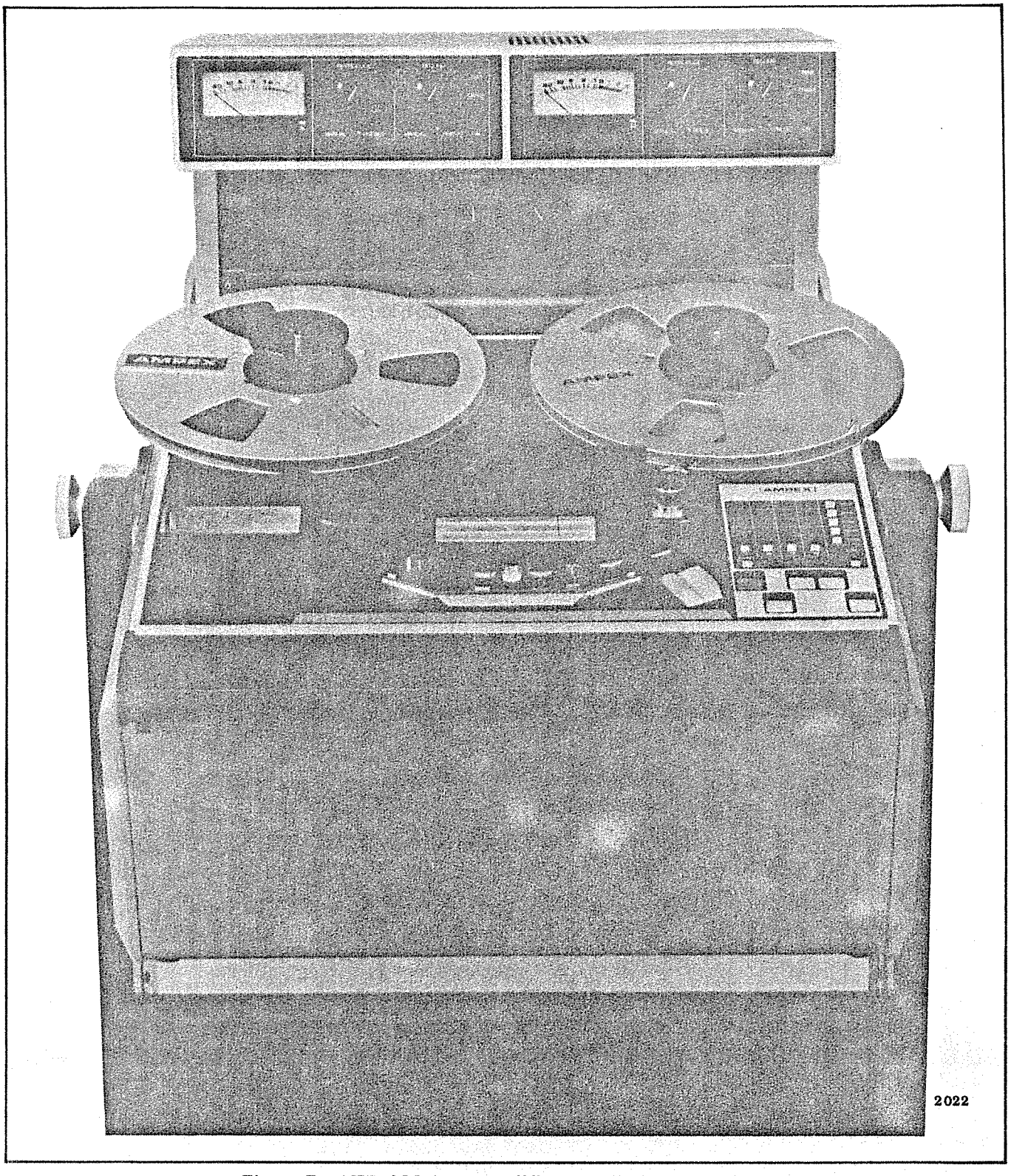


Figure 5. ATR-100 Cue Amplifier Installation Complete

PARTS LISTS AND SCHEMATICS

The parts lists and schematic diagram included with these instructions are as follows:

4010319-AA CUE AMPLIFIER KIT, CONSOLE REV.-
4010319-AB CUE AMPLIFIER KIT, PORTABLE & RACK MOUNT
NEXT HIGHER ASSEMBLY CATALOG

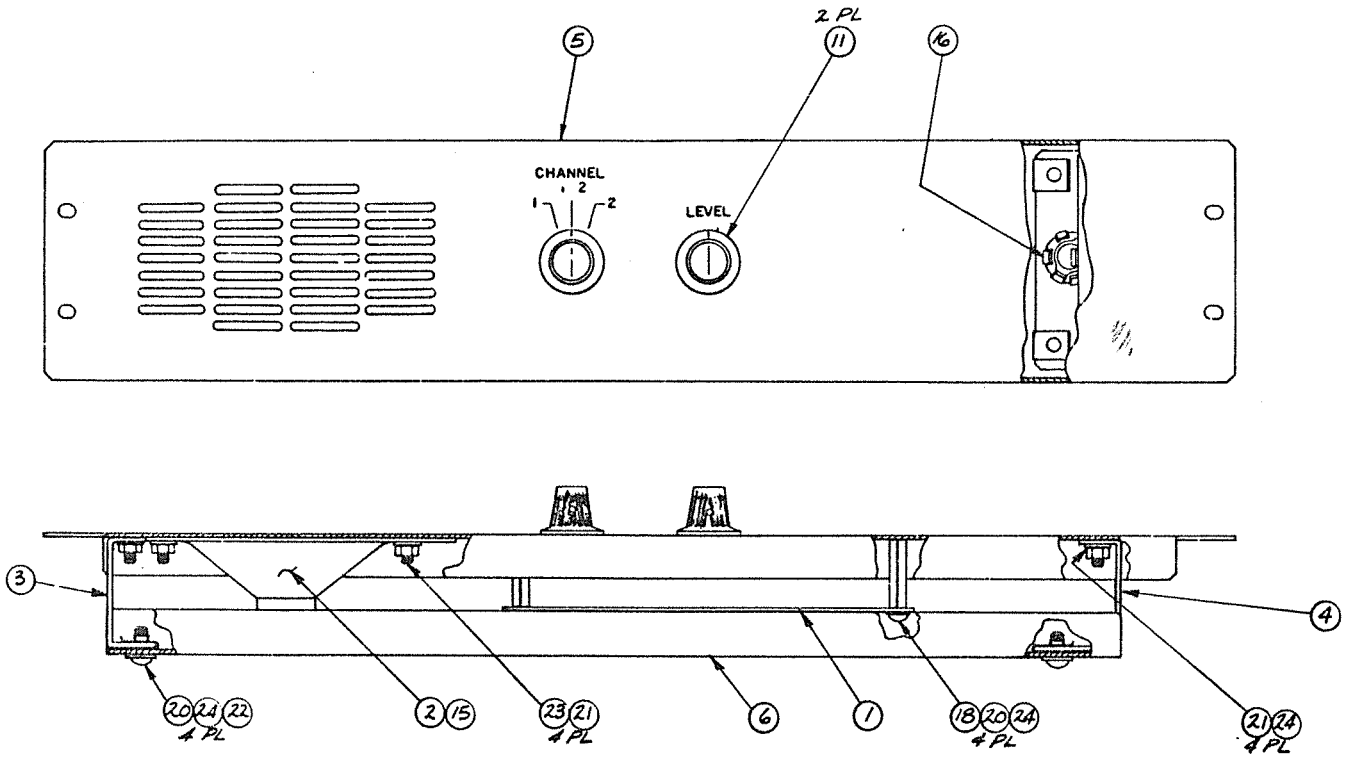
ITEM NO.	PART NUMBER	DESCRIPTION	REF DESIG	QTY REQD PER DASH NUMBER -AA	-AB
1	4260635-AA	BRACKET, PANEL MOUNTING		1	-
2	4260635-AB	BRACKET, PANEL MOUNTING		1	-
3	4291045-01	PANEL, FILLER, CONSOLE		1	-
4	4291046-01	PANEL, FILLER, PORTABLE & RACK MOUNTING		-	1
5	4020462-01	CUE AMPLIFIER ASSEMBLY		1	1
6	4051008-01	CABLE ASSEMBLY		1	1
7	473-703	SCREW, #8-32 X .37 LG, BUTTON HD., HEX SOCK DRIVE		6	8
8	498-600	NUT, #8-32, SHEET SPRING "U" SHAPE		-	4
9					
10	501-780	WASHER, #8 PLAIN, BLACK		6	8
11					
12					
13					
14	6000035-02	LABEL, IDENTIFICATION	1	1	1
15					
16	4890421-01	INSTALLATION INSTRUCTIONS		1	1

NOTES:

1 MARK CATALOG NUMBER AND ATTACH LABEL TO REAR OF CUE AMPLIFIER ASSEMBLY.

4020462-01 CUE AMPLIFIER ASSEMBLY REV. –
NEXT HIGHER ASSEMBLY 4010319

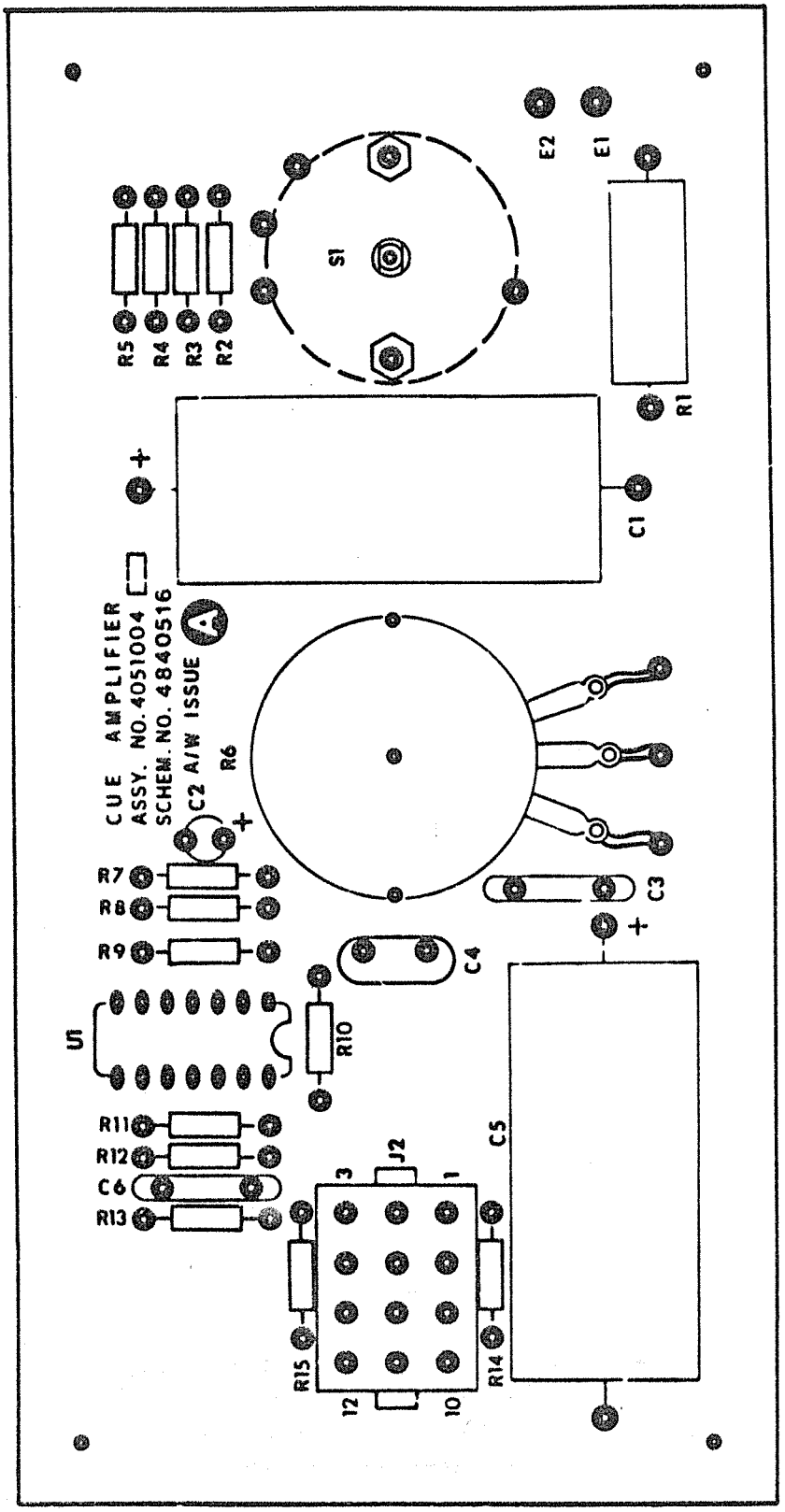
ITEM NO.	PART NUMBER	D	DESCRIPTION	REF DESIG	QTY REQD PER DASH NUMBER -01
1	4051004-01		P.W. ASSEMBLY, CUE AMPLIFIER		1
2	4170363-01		GRILLE CLOTH, SPEAKER		1
3	4260636-01		BRACKET, END		1
4	4260637-01		BRACKET, PHONE JACK		1
5	4291043-01		PANEL, MONITOR CONSOLE		1
6	4291044-01		PANEL, CUE AMPLIFIER, BACK		1
7	4840516		SCHEMATIC, CUE AMPLIFIER		A
8					
9					
10					
11	6000006-20		KNOB, 5/8" SKIRTED, BLACK		2
12					
13					
14					
15	104-028		SPEAKER, 3" X 5" OVAL		1
16	148-002		CONNECTOR, PHONE JACK, 2 COND.	J3	1
17					
18	283-237		SPACER, #8-32 X 1 LG, PLAIN, HEX, .250 AF		4
19					
20	475-044		SCREW, #8-32 X .37 LG, PAN HD., XREC, SEM		8
21	496-006		NUT, #8-32, SEM		8
22	498-600		NUT, #8-32, SHEET SPRING "U" SHAPE		4
23	501-190		WASHER, #8, PLAIN, SMALL PATTERN		4
24	501-205		WASHER, #8, PLAIN, REGULAR		12
25					
26			WIRE, STRANDED, INSULATED, 22 GA.		A/R



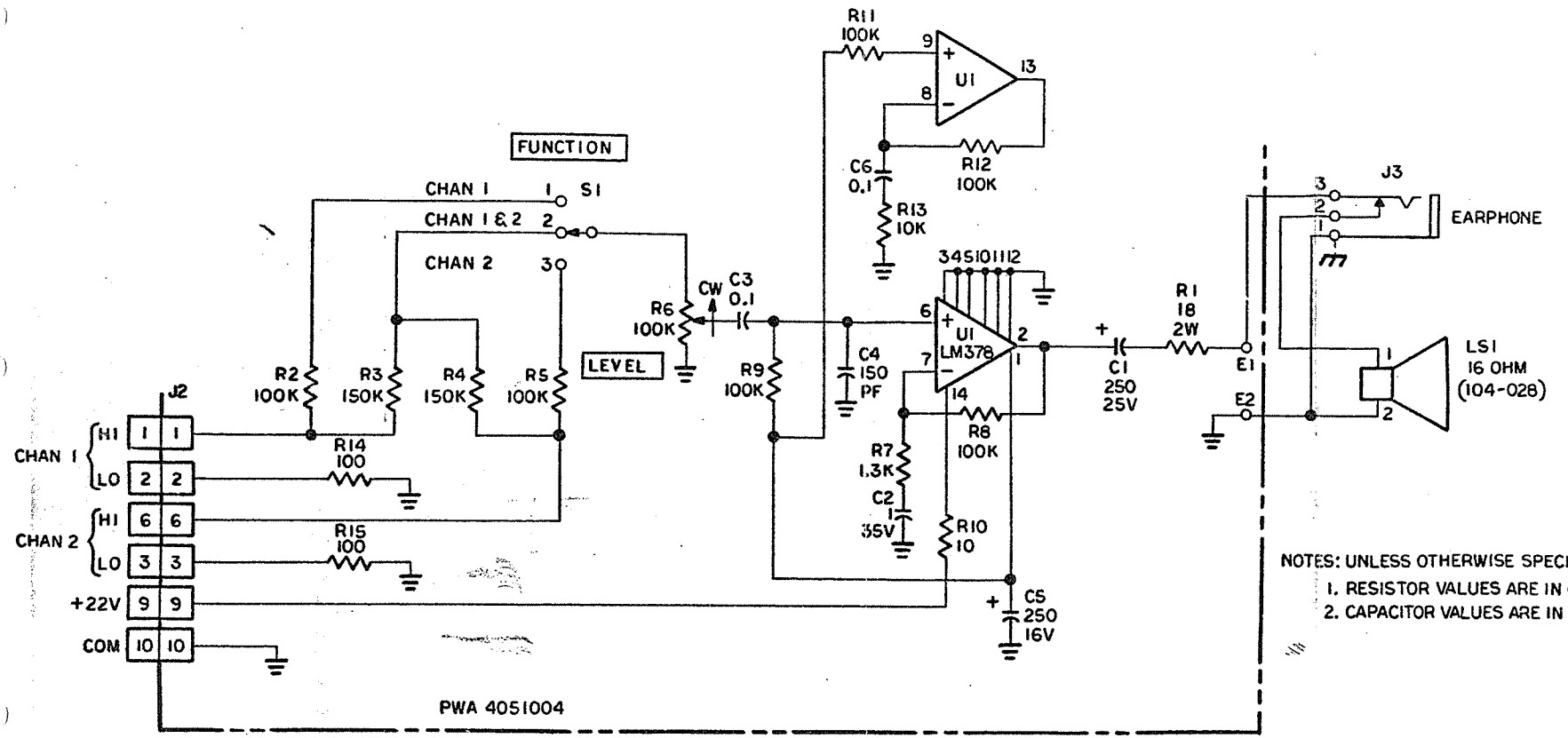
Assembly No. 4020462. Cue Amplifier Assembly

4051004-01 CUE AMPLIFIER PWA REV. –
NEXT HIGHER ASSEMBLY 4020462

ITEM NO.	PART NUMBER	DESCRIPTION	REF DESIG	QTY REQD PER DASH NUMBER -01
1				
2	4840516	SCHEMATIC, CUE AMPLIFIER		(-)
3				
4				
5	041-669	RESISTOR, COMP., 18 OHMS, 5%, 2W	R1	1
6	066-849	RESISTOR, C.F., 100K OHMS, 5%, 1/4W	R2,5,8,9,11,12	6
7	066-974	RESISTOR, C.F., 150K OHMS, 5%, 1/4W	R3,4	2
8	066-830	RESISTOR, C.F., 10K OHMS, 5%, 1/4W	R13	1
9	066-810	RESISTOR, C.F., 10 OHMS, 5%, 1/4W	R10	1
10	066-812	RESISTOR, C.F., 100 OHMS, 5%, 1/4W	R14,15	2
11	066-841	RESISTOR, C.F., 1.3K OHMS, 5%, 1/4W	R7	1
12	075-240	RESISTOR, VARIABLE 100K OHMS, LOG TAPER	R6	1
13				
14				
15	031-399	CAPACITOR, ELECTROLYTIC, ALUM., 250ufd, 25V	C1	1
16	034-220	CAPACITOR, MICA, 150pF, 500V	C4	1
17	037-591	CAPACITOR, TANT., DIPPED, 1uf, 35V	C2	1
18	063-366	CAPACITOR, ELECT., ALUM., 250uf, 16V	C5	1
19	030-095	CAPACITOR, MONO., 0.1uf, 25V	C3,6	2
20				
21	122-490	SWITCH, ROTARY SP3T	S1	1
22	139-820	CONNECTOR, RECEPTACLE, 12 PINS	J2	1
23	589-763	CIRCUIT, INTEGRATED, LM378	U1	1
24				
25	600-296	SLEEVING, CLEAR , 24 AWG	REF: R6	A/R
26	615-090	WIRE, SOLID, 24 AWG	REF: R6	A/R



Assembly No. 4051004. Cue Amplifier PWA



NOTES: UNLESS OTHERWISE SPECIFIED:

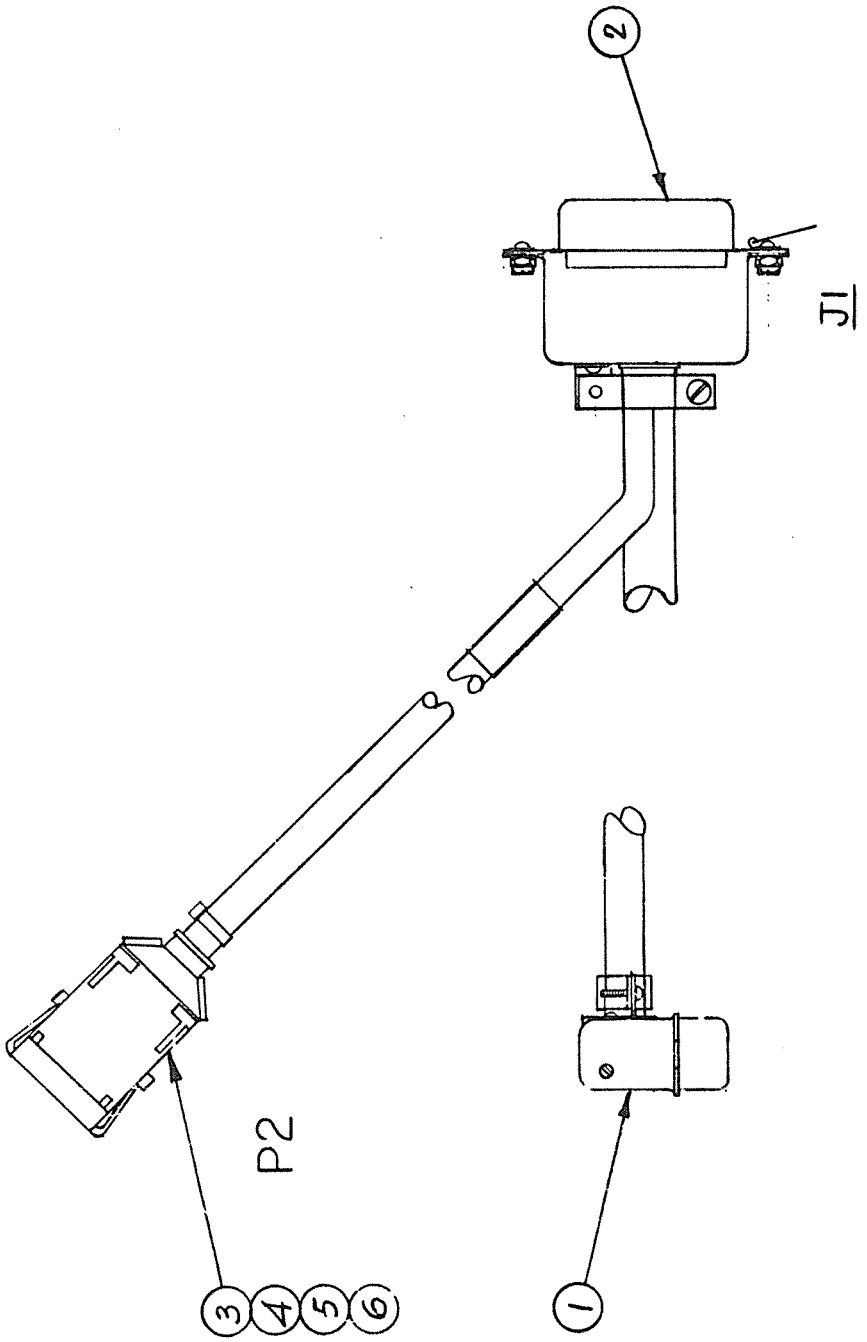
1. RESISTOR VALUES ARE IN OHMS, 1/4W, ±5%
2. CAPACITOR VALUES ARE IN MICROFARADS

REF DES	
HIGHEST NO. USED	NO. NOT USED
C6 E2 J3 R13 S1 U1 LS1	J1

Schematic No. 4840516.
Cue Amplifier

4051008-01 CUE AMPLIFIER CABLE ASSEMBLY REV. –
NEXT HIGHER ASSEMBLY 4010319

ITEM NO.	PART NUMBER	C	DESCRIPTION	REF DESIG	QTY REQD PER DASH NUMBER -01									
1	139-840		CONNECTOR, FEMALE, 24 CONTACTS	P1	1									
2	140-311		CONNECTOR, RECEPTACLE, 24 CONTACTS	J1	1									
3	167-024		CONNECTOR, RECEPTACLE, 12 POS.	P2	1									
4	167-226		HOOD & STRAIN RELIEF	REF: P2	2									
5	166-224		SOCKET, CONNECTOR, 26-24 AWG	REF: P2	4									
6	166-225		SOCKET, CONNECTOR, 16-18 AWG	REF: P2	2									
7														
8	616-282		CABLE, SHIELD & JACKET, 26 GA.		A/R									
9														
10														
11														
12			WIRE, STRANDED, INSULATED, 24 GA.		A/R									
13			SLEEVING, SHRINKABLE, BLACK		A/R									
14			SLEEVING, FLEXIBLE, BLACK		A/R									
15														



Assembly No. 4051008. Cue Amplifier Cable Assembly

AMPEX

INSTRUCTIONS

INSTALLATION INSTRUCTIONS

ATR-100 EDIT KIT

GENERAL

The ATR-100 Edit Kit insures accurate tape marking and splicing during edit operations. Kit part number 4010292-AA is used for 1/4-inch tape, and part number 4010292-AB is used for 1/2-inch tape.

DESCRIPTION (See Figure 1)

The edit kit consists of a splicing block (for either 1/4 in. or 1/2 in.), a marking block, a support block, and a tray. The marking block insures that the mark made on the tape is always 1.5 in. behind the reproduce head gap. The support insures no tape movement when operator is marking tape. The splicing block is calibrated to insure that the tape splice is properly related to the tape mark. When the mark on the tape is positioned on the perpendicular cut on the splicing block the splice should be made at the diagonal cut on the splicing block. The tray provides a storage area for splicing tools and markers.

1. Remove transport front overlay assembly as follows:

   a. Lift off head cover assembly.
   b. Remove two mounting screws on transport front overlay assembly and remove assembly.

2. Turn transport front overlay upside down with front toward kit installer.

3. Mount drill template to left side of overlay using 1/2-inch-long mounting screw and 6/32-inch nut.

4. Align side and bottom of template to overlay and drill 2 holes through overlay as indicated by template.

5. Remove template.

6. On transport front overlay (part no. 4110296-01) only, counter-bore hole 0.312 inch in diameter and 0.16 inch deep.

7. Turn transport front overlay right side up.

AMPEX 4890420-01
ISSUED: JUNE 1979

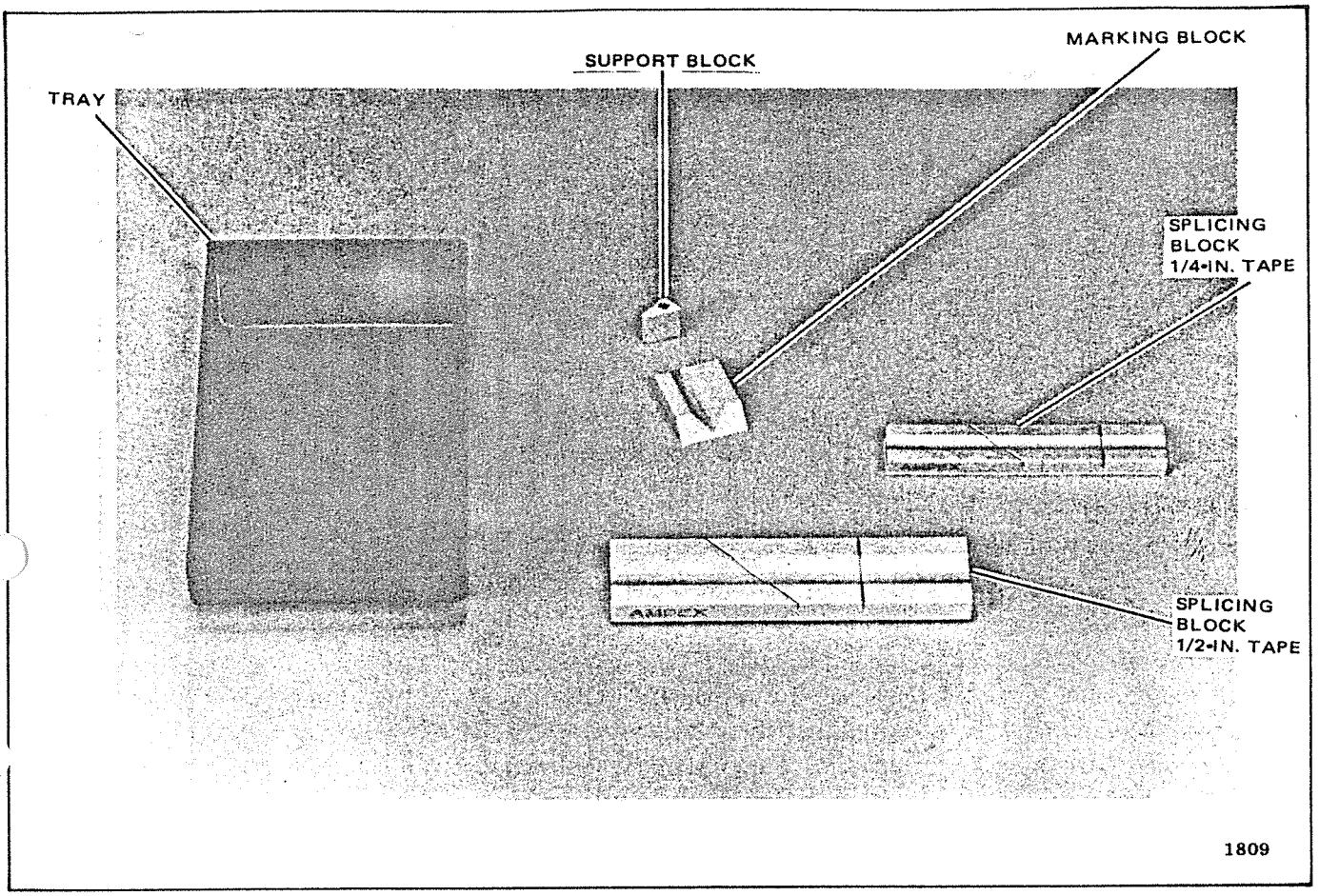


Figure 1. Edit Kit Part No. 4010292-AA or -AB

8. Mount support block in hole previously used for template, using 1-inch screw, plain washer, and lock washer.

9. Mount marking block on transport front overlay, using two 1/4-inch-long screws and plain washer. Do not tighten screws.

10. Set transport front overlay assembly aside and proceed with installation.

11. Lower ATR-100 front panel.

12. Examine left forward underneath side of transport mounting for two screws holding filler panel in place (see Figure 2). If two screws are present proceed to step 14. If two screws are not present proceed to step 13.

13. Pop out filler panel and proceed to step 25.

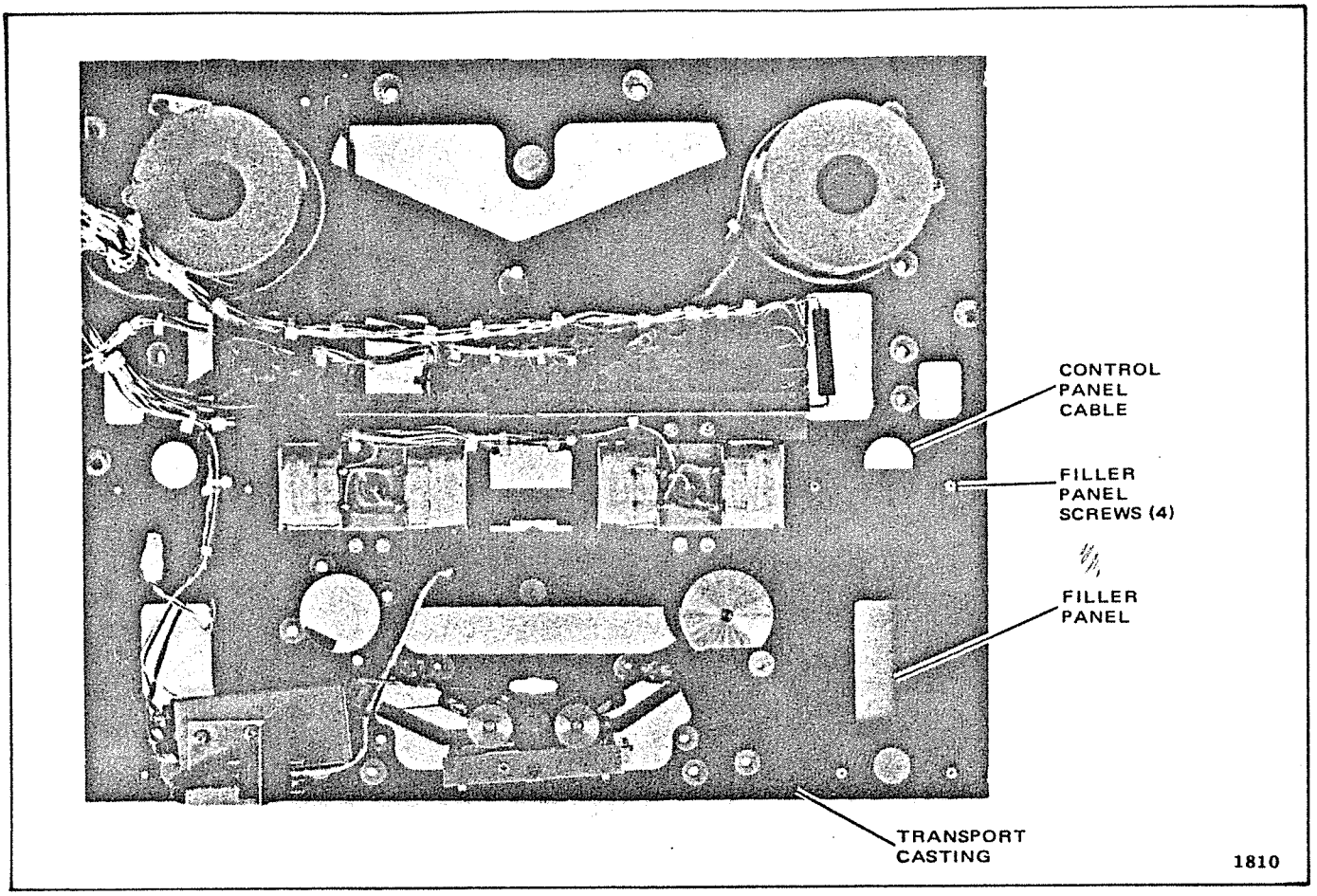


Figure 2. Rear View of Filler Panel (Transport Components Removed for Clarity)

14. Remove front extrusion assembly (arm rest) from cabinet by removing two screws.

15. Remove six screws holding rear overlay panel and remove panel (see Figure 3).

16. Remove three transport mounting screws from transport mounting holes (see Figure 4) and remove transport from case.

17. Disconnect fan connector P20.

18. Remove ground strap that connects to electronics assembly from the tape transport. On early production units, strap is located front left of transport. On later units, strap is located in the rear of the head connector area.

19. Disconnect electronics assembly harness connector P16 that connects to tach sensor connector J16.

20. Disconnect electronics assembly harness connector P15 that connects to reel drive connector P15.

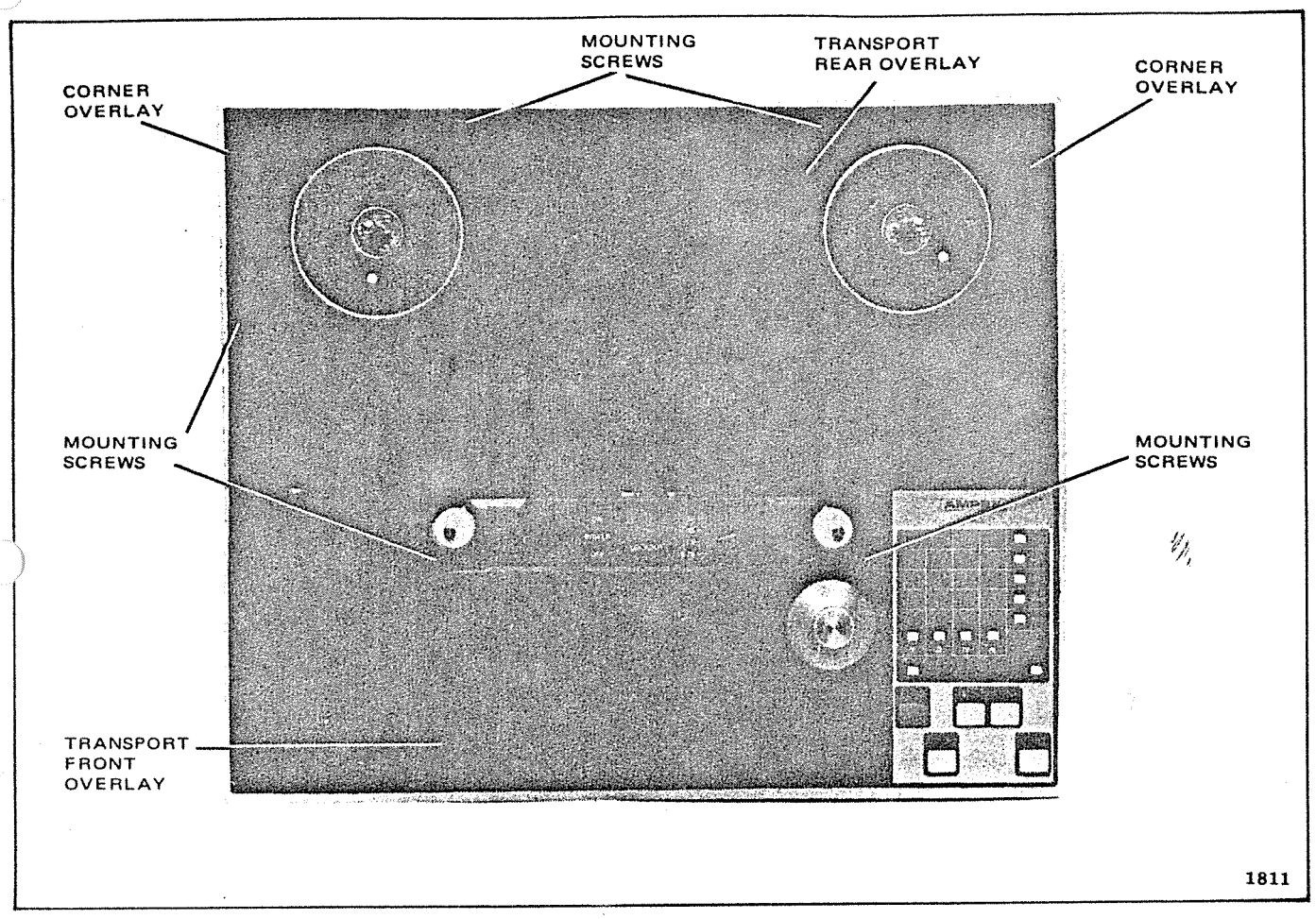


Figure 3. Rear Overlay Panel, Six Mounting Screws

21. Disconnect control panel connector P11 from electronics assembly double-sided connector J11.

22. From the top of the transport, remove three 6-32 cap screws (Figure 5) that secure the electronics assembly to the transport.

23. From the bottom of the transport, slide electronics assembly chassis toward the supply reel and lift electronics assembly from the transport.

24. Remove left-hand filler panel by removing four flat-head screws accessible from the bottom of the transport casting.

25. Set tray in space created by removal of filler panel.

26. Reinstall electronics assembly in the reverse order of removal, being careful not to damage any cables (especially cable/connector P10).

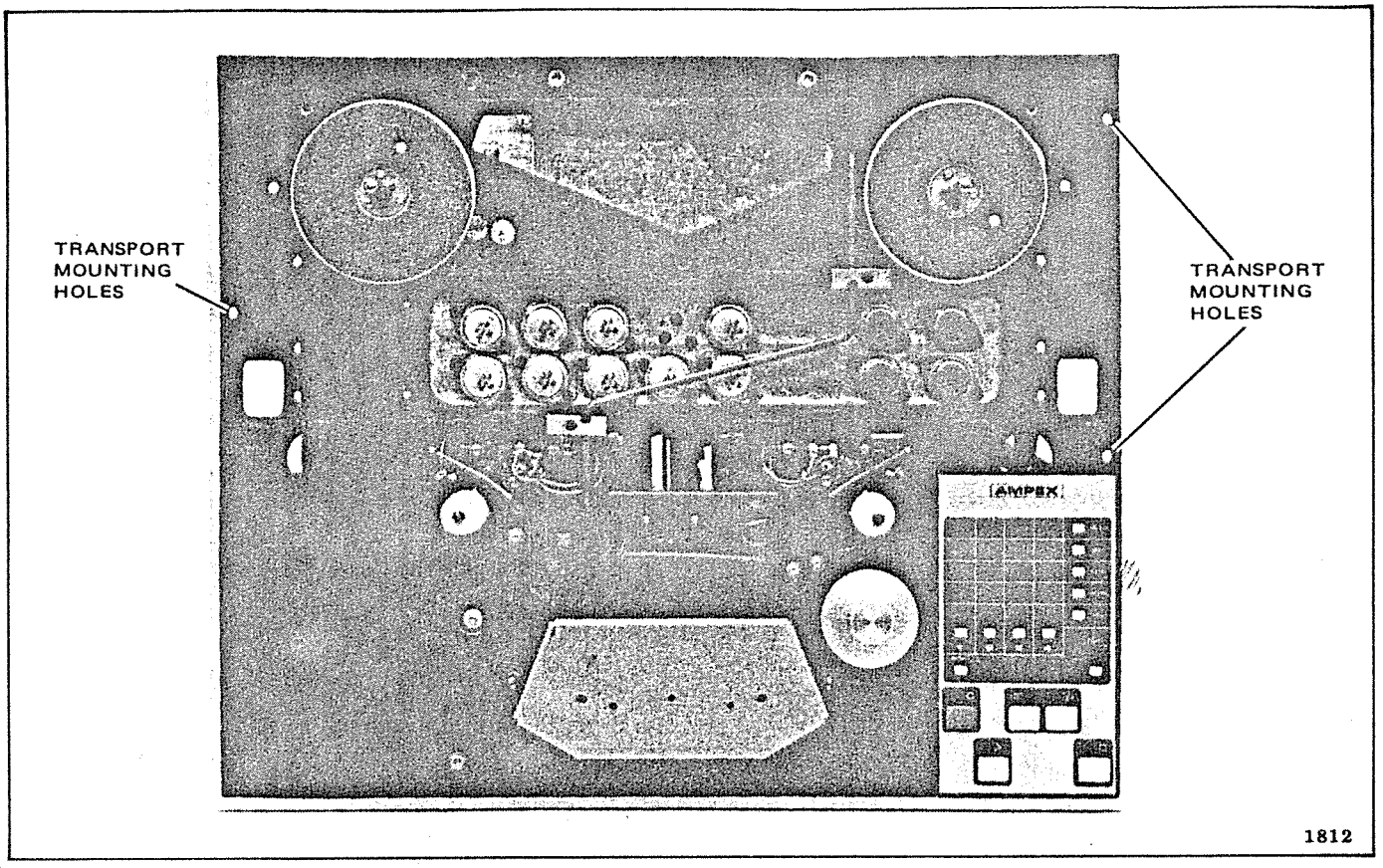


Figure 4. Transport Mounting Holes, Location

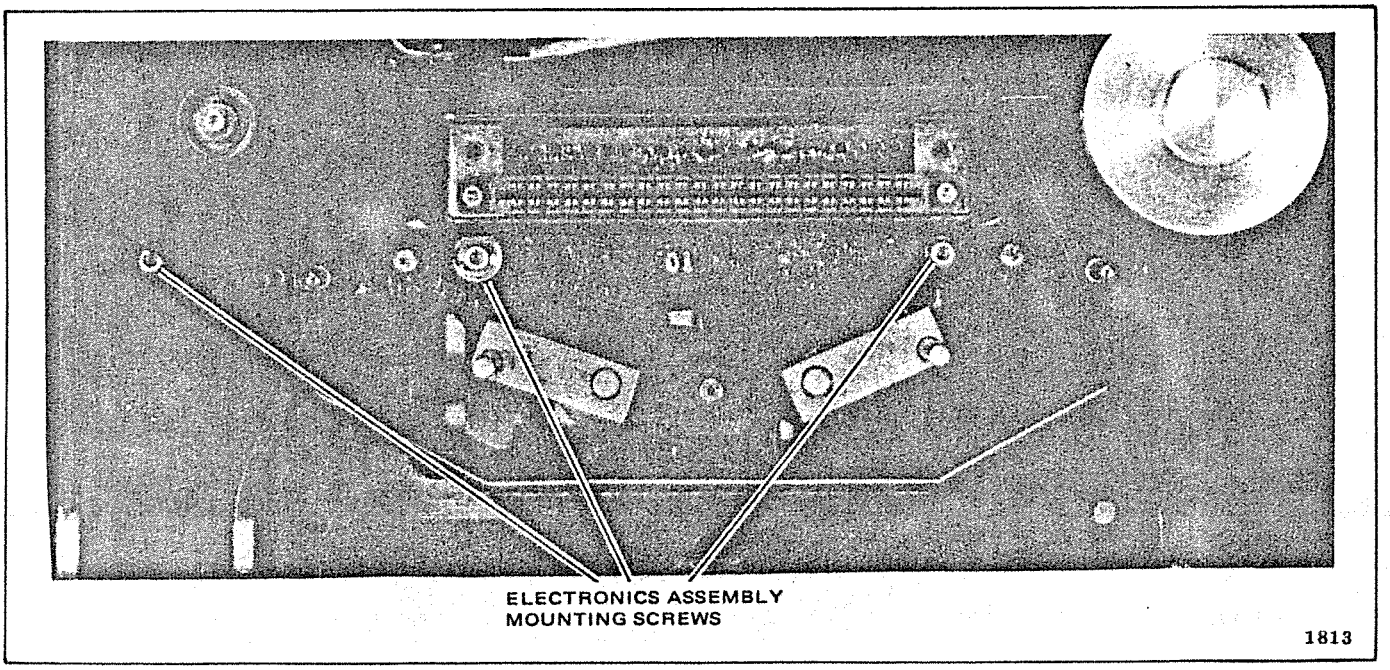


Figure 5. Electronics Assembly Mounting Screws, Location

27. Reinstall transport in case and tighten three transport mounting screws.

28. Install rear overlay panel and tighten six mounting screws.

29. Install front extrusion assembly (arm rest) and tighten two mounting screws.

30. Install transport front overlay. Do not tighten screws.

31. Align marking block V 1.5 (±0.010) inch from reproduce head gap (see Figure 6).

32. Tighten marking block mounting screws.

33. Position splicing block on cover assembly and press in place.

34. For completed installation, see Figure 7.

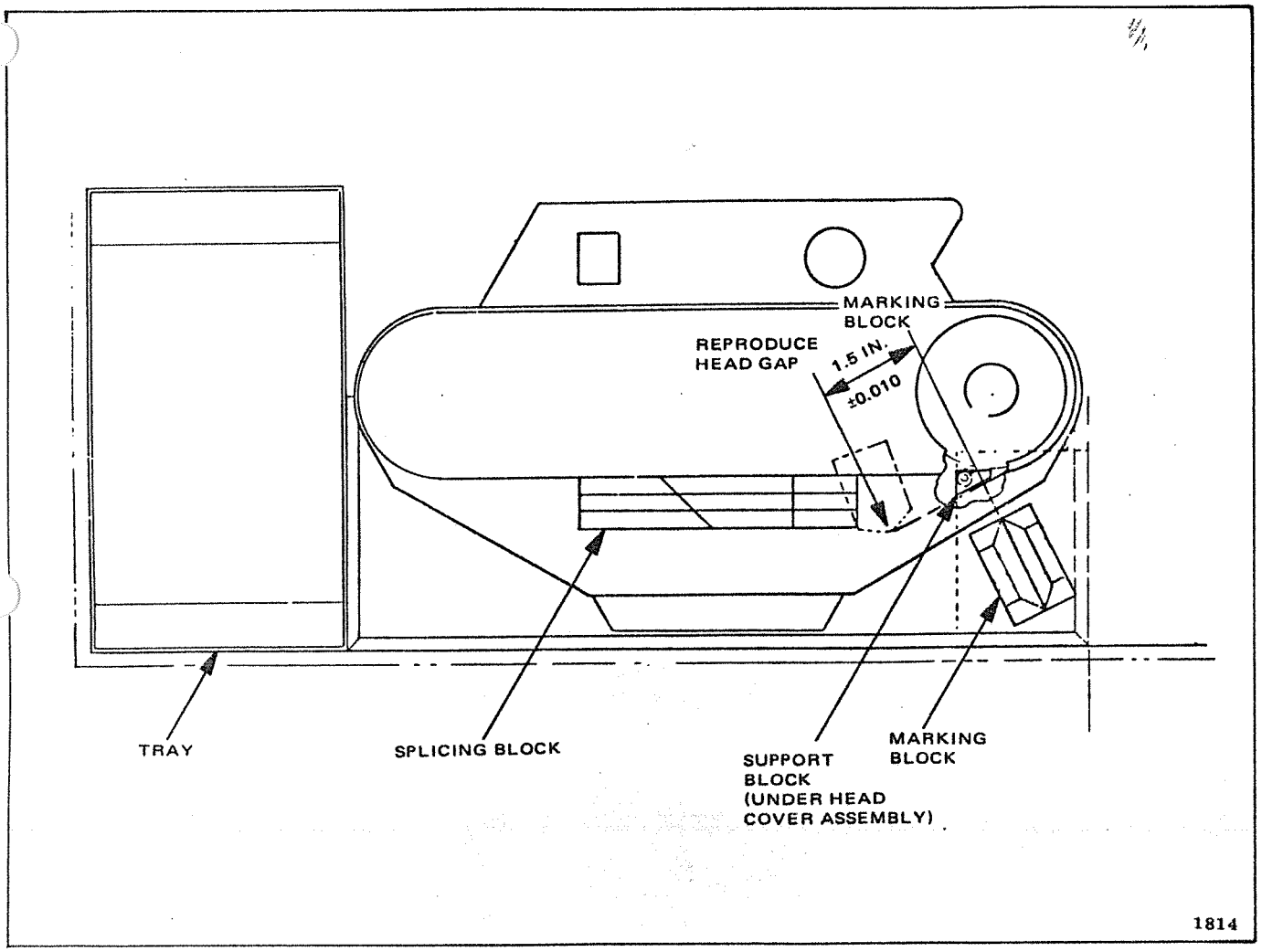


Figure 6. Support Block Mounting, Location

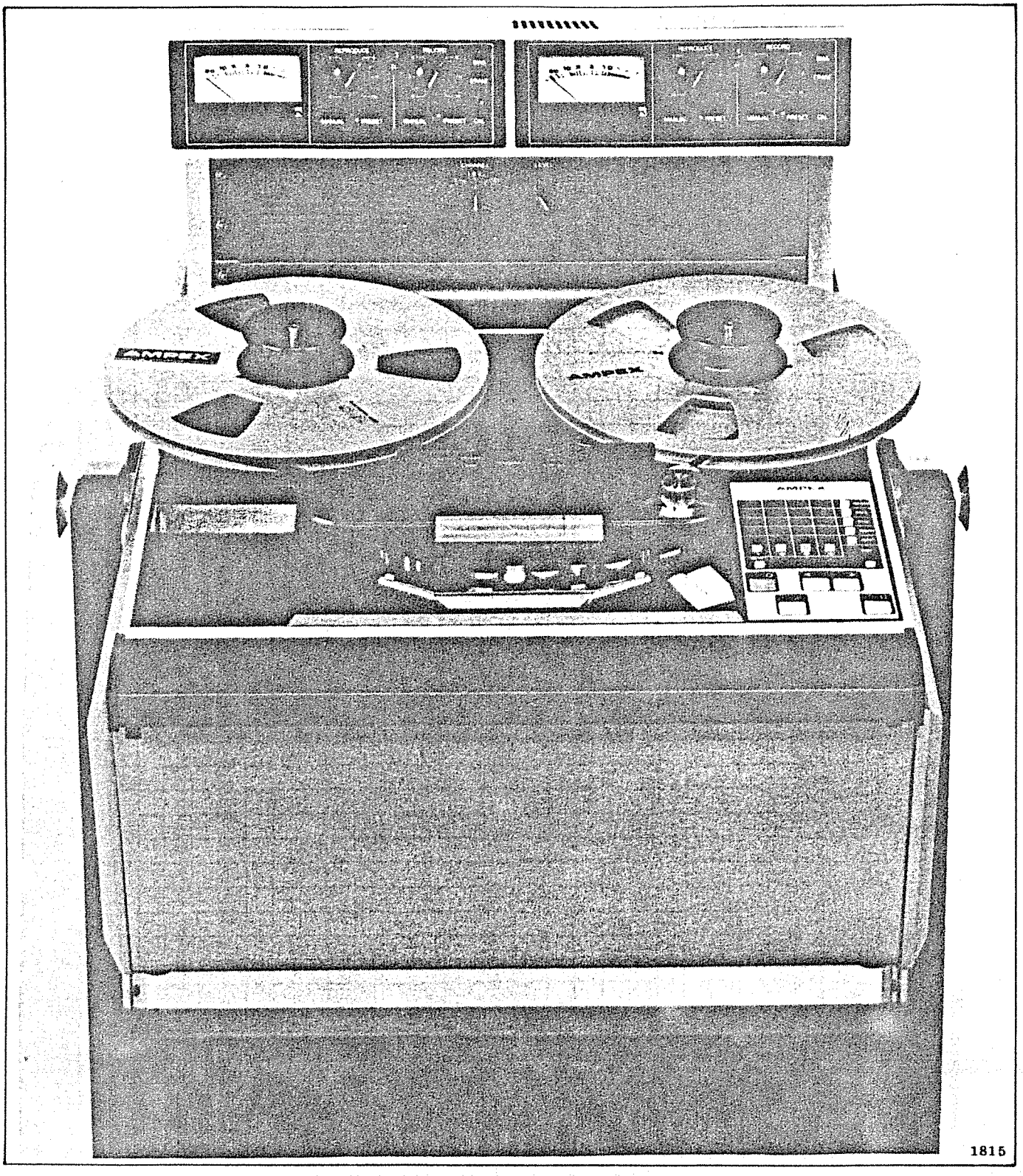


Figure 7. Edit Kit, Installation Complete

PARTS LIST

The parts list and assembly drawing included with these instructions are as follows:

4010292-AA EDIT KIT ASSEMBLY, 1/4 INCH
4010292-AB EDIT KIT ASSEMBLY, 1/2 INCH
NEXT HIGHER ASSEMBLY CATALOG

ITEM NO.	PART NUMBER	C	DESCRIPTION	REF DESIG	QTY REQD PER DASH NUMBER -AA	-AB
1	4220334-01		BLOCK, MARKING		1	1
2	4220335-01		BLOCK, SUPPORT		1	1
3	4220348-01		BLOCK, SPLICING, 1/4 TAPE		1	-
4	4220349-01		BLOCK, SPLICING, 1/2 TAPE		-	1
5	4291041-01		TRAY		1	1
6	4930514-02		TEMPLATE, DRILL		1	1
7						
8						
9						
10	4890420-01		INSTALLATION INSTRUCTIONS		1	1
11						
12						
13						
14						
15	470-171		SCREW, CAP HEX SOC, 4-40 X 1.0 LG		1	1
16	473-324		SCREW, PAN HD., SEM, XREC DRIVE, 4-40 X .25 LG		2	2
17	501-169		WASHER, PLAIN, .25 O.D., #4		3	3
18	502-002		WASHER, LOCK, HELICAL SPRING, #4		1	1
19	471-338		SCREW, MACH., FLAT HEAD, 6-32 X .500 LG		1	1
20	492-009		NUT, PLAIN, HEX, 6-32		1	1

LM-4010292

AMPEX

ATR-100 ACCESSORIES

Four speed/dual EQ Padnet™

Features

- **Multiple speed and dual mode EQ at the turn of a switch.**
- **Plug-in compatibility offering new and greater flexibility when equalizing and biasing.**
- **Permits a flatter overall frequency response with a wider range of tape and biasing conditions.**

On-Going ATR-100 Developments

The four speed/dual EQ Padnet assembly provides the ATR-100 user with even more set-up and operating flexibility. Totally plug-in compatible, you can use it interchangeably with the standard Padnet Assembly. Requires no modification to the standard ATR-100.

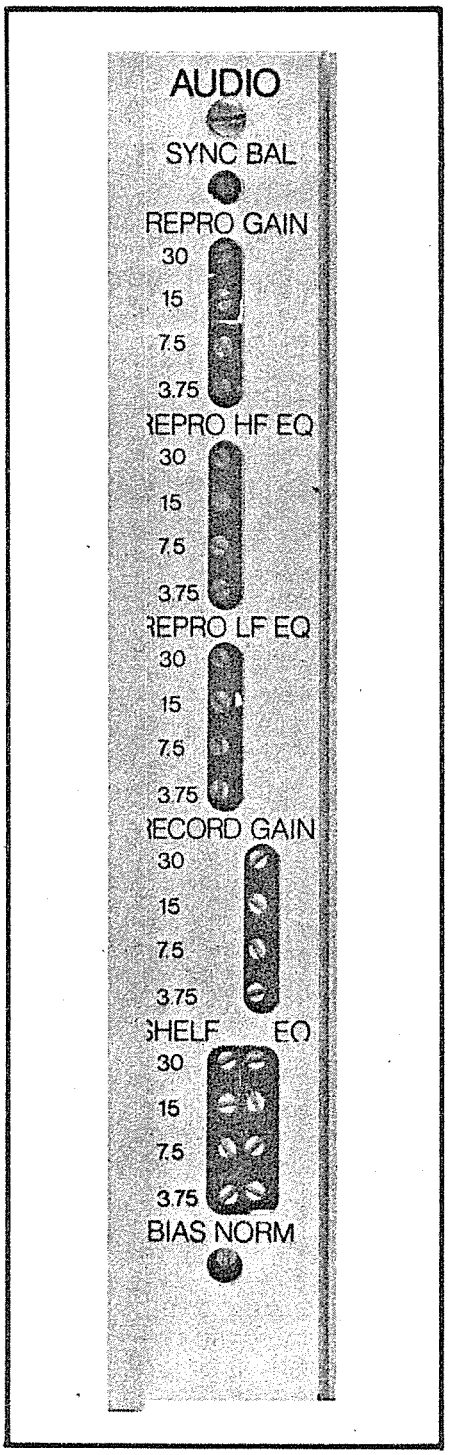
Simple switch selections let you quickly configure this new Padnet accessory in two modes. Using the existing jumper options for master bias on the audio control PWA, you have an extremely flexible equalizing and biasing system that will save you time and money.

Four speed configuration lets you run the ATR-100 at all its speeds, individually biased, level controlled and equalized. Any standard, any speed... set it and it's ready to go.

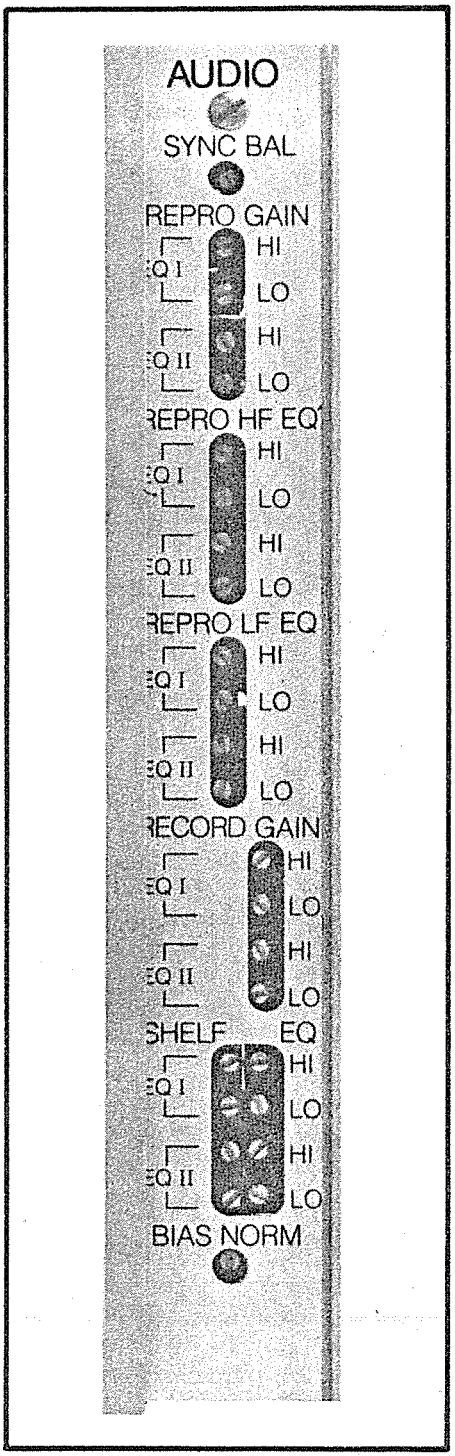
Four Speed/Dual EQ Accessory

Two speed, dual EQ operation is similar to the ATR-100's standard Padnet. The difference is that each of the two speeds selected has two separate equalizers and level controls. You choose which equalizer you want to use on the EQ I/EQ II switch on the audio control PWA. Additionally, the audio control PWA provides individual master bias adjustments for each speed/equalizer.

With this new Padnet accessory, the full four speed capability of this high performance recorder is now realized. Using it a second way, select the two speed dual EQ you want, and align the two equalizers, levels and biasing for the standards (I.E., NAB, & IEC). A third possibility is to align for two types of tape at each speed.



Four Speed



Dual EQ

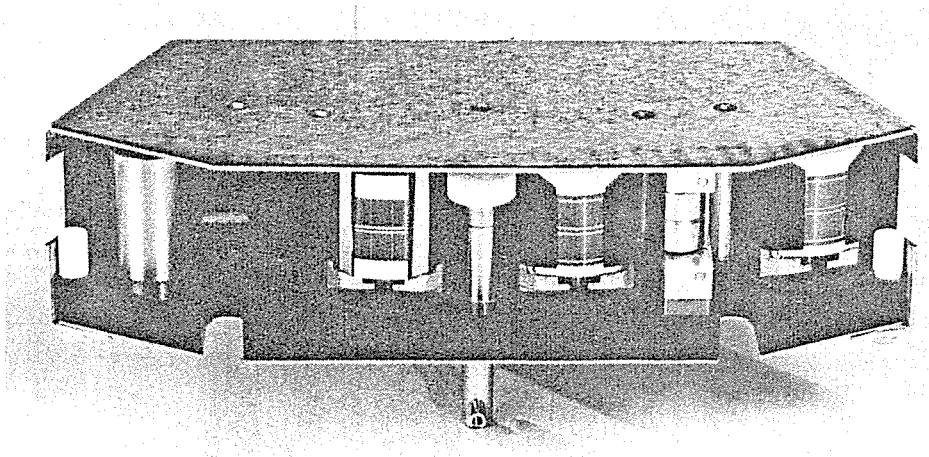
"Record Shelf"

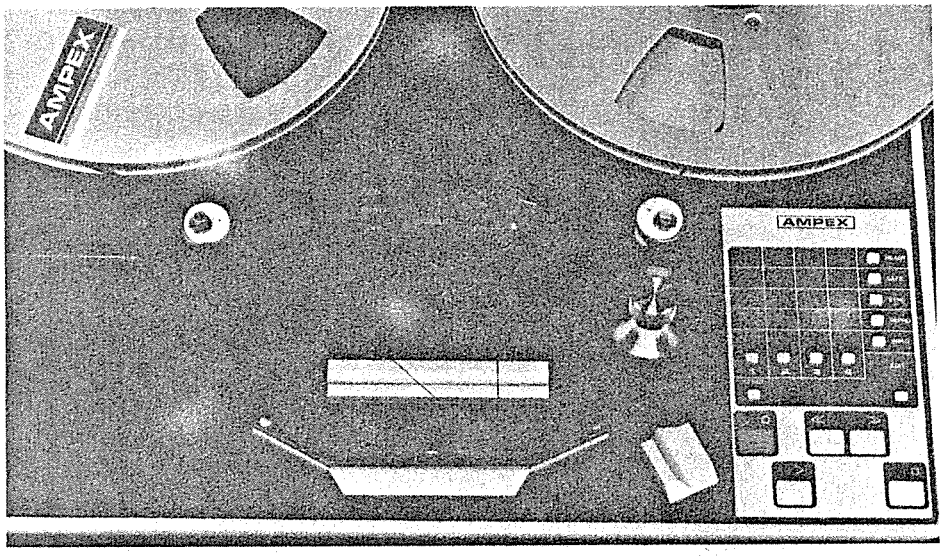
One final feature to mention. A superior overall response is obtained by using the "Record Shelf" along with the normal record HF equalizer.

ATR-100 Half Inch, Two-Track Head Assembly

Features

- 2 channel stereo format with full track specifications.
- Allows 80 dB S/N 30 ips.
- Head assembly is standard, quick-mount, one tool installation with limited azimuth adjustment.
- Maximizes mixdown quality for highest quality recording needs.





ATR-100 Editing Kit

Features

- Provides increased on-the-spot manual editing ease.
- Four-piece kit includes marking, support and splicing blocks and accessory tray.
- Simplified installation for either ¼ or ½ inch tape operation.

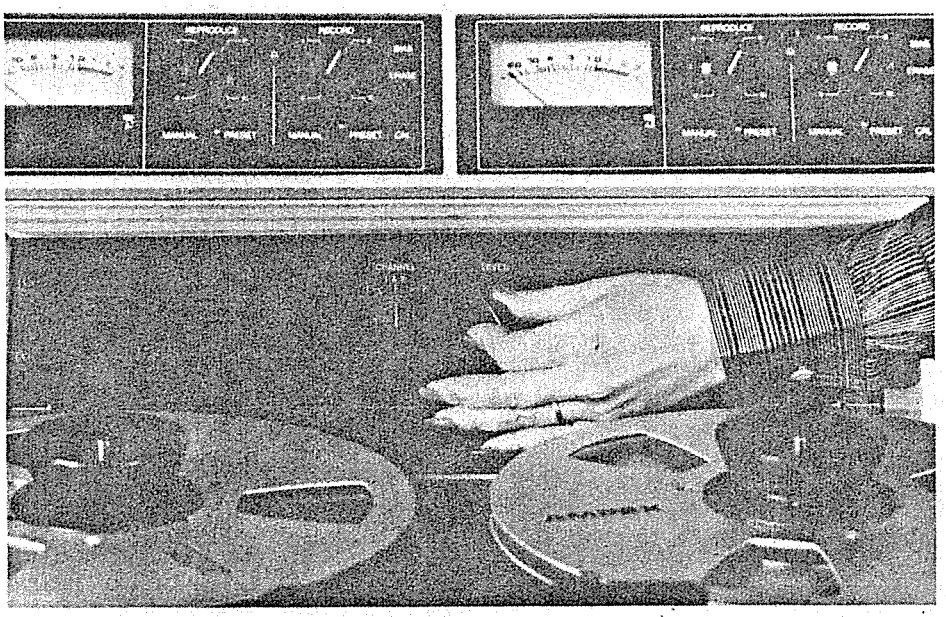
ATR-100 Cue Amplifier

Features

- Provides your ATR-100 with fully self-contained audio monitoring capability.
- Affords greater creative editing control.
- ATR-100 console mounts beneath I/O bridge. Rack version as well.
- Available in I/O bridge or rack mounting versions.

On-going ATR-100 Developments to Satisfy Customer Needs

The ATR-100 audio amplifier accessory is capable of monitoring either or both channels with level control independent of I/O module settings. The unit includes a 3″ x 5″ speaker as well as a mono jack easily accessible at the rear of the amplifier console. Together with the edit/splicing kit, the ATR-100 delivers increased, self-contained editing ease.



AMPEX MOSCOW 1980

OFFICIAL SUPPLIERS VIDEO RECORDERS AND MAGNETIC TAPE XXII OLYMPIAD

AMPEX

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SECTION 10
AUDIO

ATR-100

Supply Reel Oscillation When Small Plastic Reels Are Used

All machines presently in the field as demonstrators will have some amount of oscillation which results in flutter when using plastic reels and slower speeds. This is due to the low mass at the supply reel. An engineering change is being made to eliminate this problem. On the reel servo PWA 4050778, R26 presently is a 16K, ¼W, 5% carbon film resistor. A change to 68K should solve the problem. It would be advisable to change this component as soon as possible.

MM-1200

Random Tracks Failing To Switch Out Of Sync Mode – Unable To Record

Several cases of failure to record have been reported. The problem is caused by a tolerance overlap on the audio switcher card, part no. 4050774-01. Occasionally the sync/repro relay K-4 will not de-energize in play/record mode. A quick, temporary fix is to increase the 27 Vdc supply to 28 volts. However an E.C.N. has been written to change the zener voltage of VR-1 on the audio switcher card from 24 Vdc to 20 Vdc (Ampex Part No. 013-703). All machines coming from the factory with a 4050774-02 audio switching card will have the zener change implemented.

Garry McMahon.
Dennis Stokes.
Alan Phillips.

MULTIPOINT SEARCH-TO-CUE ACCESSORY
for ATR-100/MM-1200 Recorder/Reproducers
Operation and Maintenance

ERRATA NO. 2

Page 2-2: Delete Figure 2-1.

Page 2-2: Substitute new Figure 2-1, page 2 of this errata.

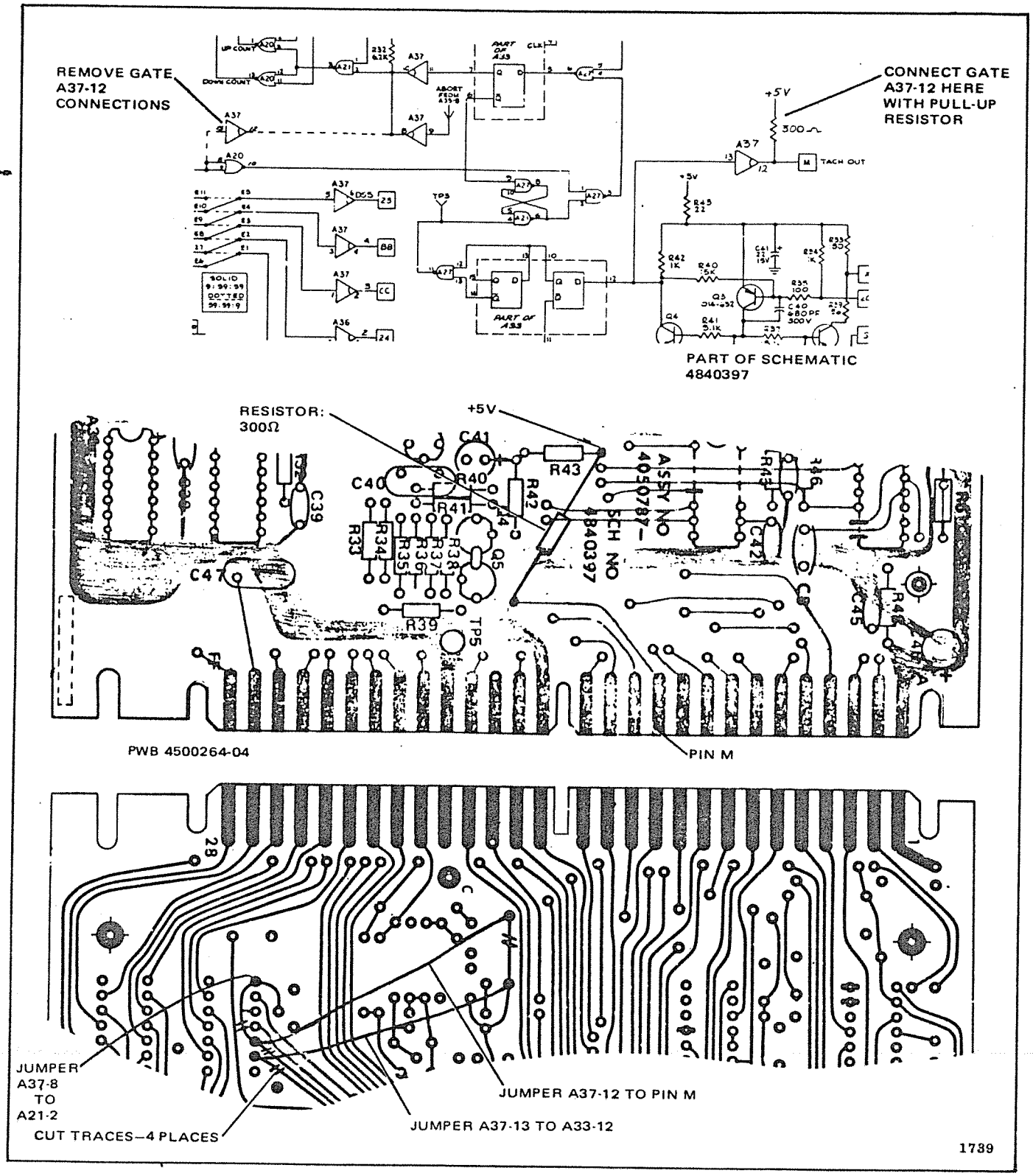

Figure 2-1. Modification to ATR-100 Logic and Tape Timer PWA