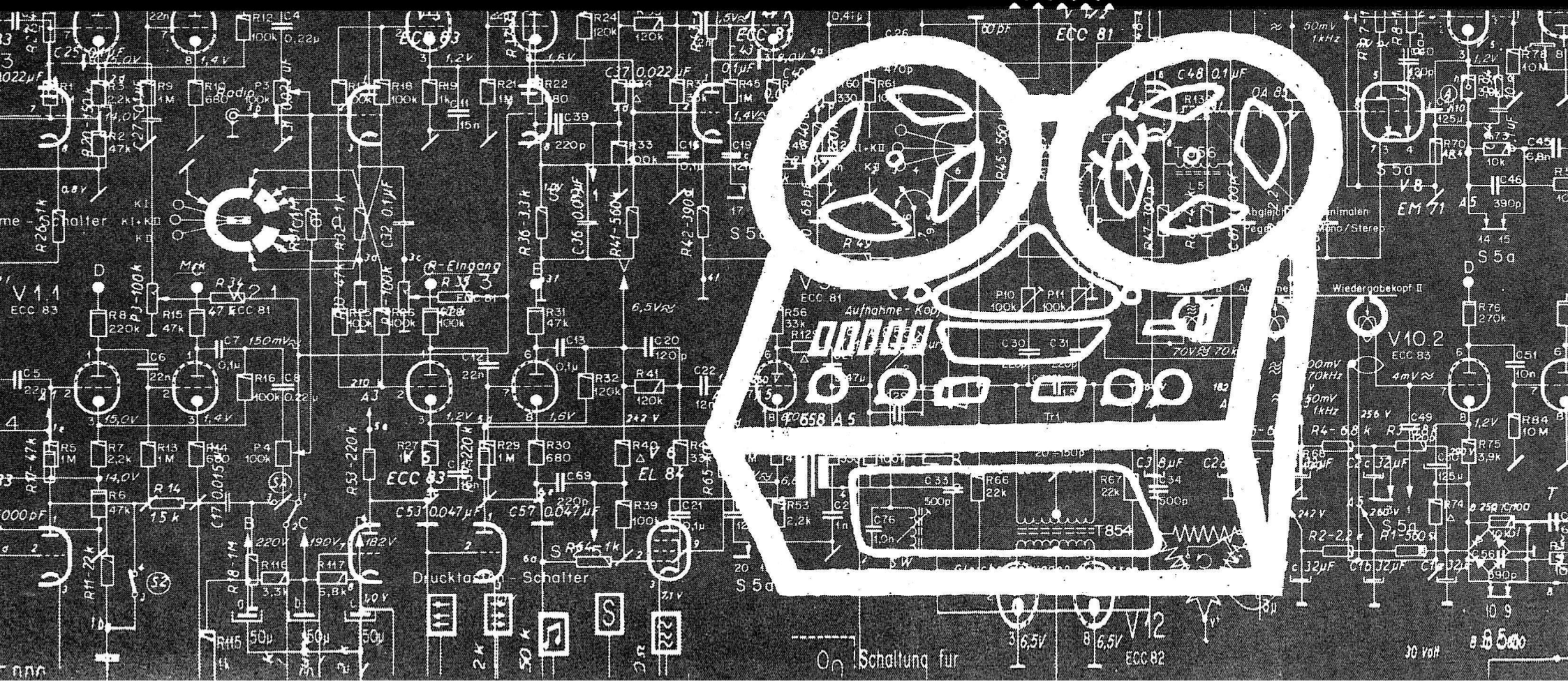


REVOX G36

Service Manual





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1. General

The REVOX Series 36 has been constantly improved and kept up to date, since it was first introduced in 1956. However, the present G still bears the same basic layout and conception as did the original A recorder.

Compared with the preceding models, the following major innovations have been incorporated in the REVOX G 36 recorder: Hysteresis-Synchronous Capstan motor, VU-meters for record level control and a tape-tension switch to permit the use of all reels from 7 inch up to 10 1/2 inch diameter.

The G 36 model is available in both 2 and 4 track versions. Identification is made by the appropriate number being stamped on the head mounting plate, and on the upper side of the lower chassis.

The recorder consists of an upper and lower chassis. These are joined at the rear by means of the back panel which carries the input and output sockets, mains voltage adjuster and fuse-holder, and at the front by means of the loudspeaker panel mountings. The upper chassis carries the tape transport mechanism and the lower chassis bears the power supply unit and the electronics.

All Audio Connections are led to standard phono sockets. To interconnect the REVOX recorder with other Audio Equipment, a selection of adapter cables is available.

2. Mechanical Description

The machine employs three motors. Two are identical and perform the wind and tension functions. The third motor is large and drives the capstan. It is of the pole switching variety and speed change is therefore effected electrically.

The wind motors are designed to provide pulse free torque. Back tension is applied by electrical counter torque during the record and playback functions as well as during wind.

The Capstan Motor is of the Hysteresis-Synchronous type, incorporating a special design feature to prevent hunting. By switching to either the 6 or 12 pole stator winding, the tape speed of 7 1/2 or 3 3/4 ips may be selected. The capstan drive, the pinch roller assembly and the headblock with the tape guides are carried on one die-cast frame. This ensures accurately parallel and permanent alignment of all major transport elements. The coupling between motor and flywheel consists of special silicone-rubber strips, with the whole assembly acting as a mechanical filter. A direct slip free drive is thus achieved whilst maintaining negligible wow and flutter.

The pinch roller is held against the capstan during record and replay functions with considerable pressure. This necessitates the use of a capstan bearing designed specifically to withstand considerable side pressure for long periods. The pinch roller arm carries the shield for the playback-head and the tape-lift mechanism for the re-wind function.

The brakes are mechanical in nature but are electrically operated. This is achieved by the action of the brake solenoid which pulls the brakes off during all operating functions. When the stop button is pressed however, or when the current fails for any reason, the solenoid is de-energized, and the brakes automatically come on, with the higher braking force always on the trailing spindle.

All functions are controlled by the push buttons. Arcing damage and noise is prevented by the use of diodes and RC networks. A sensing lever on the RH tape guide

(3 in fig. 1 and 8) operates a switch (SE on schematic) which, in series with the stop button, provides a current path to a solenoid incorporated in the push button unit. This has the effect of clearing any selected function either by depressing the stop button or operation of the end of tape switch. On recorders up to serial No. 36 500, the function of the end of tape switch is delayed by about two seconds to avoid tripping during the start mode. On machines with higher serial numbers (recognizable by the end-of-tape switch being made of gold-plated wire with NC contact configuration) this time delay (relais) has been utilized to supply increased operating voltage to the wind motors, thus providing the required starting torque. (Inset schematic B and diagram 7.736.001-002:6 refer.)

The tape guide pins to the left and right hand side of the loading slot assist in achieving uniform tape tension due to the change in friction with varying wrap-around from large to small spooling diameters.

A three digit tape counter is driven from the take-up turntable by a rubber belt. The translucent resetting knob of the counter is lit by a small pilot bulb which acts as a mains indicator.

A remote control facility is provided

Removal of the shorting link from the socket on the rear panel and the insertion of the correct accessory plug, lead and switch, enables the recorder to be started or stopped in either the record or playback function as selected. Operation of the remote control switch has the effect of de-energizing both the capstan and brake solenoids .

ATTENTION If no remote control is used, the dummy plug must be inserted into the socket, otherwise the recorder will not start.

2. 1. Mechanical checks and adjustments

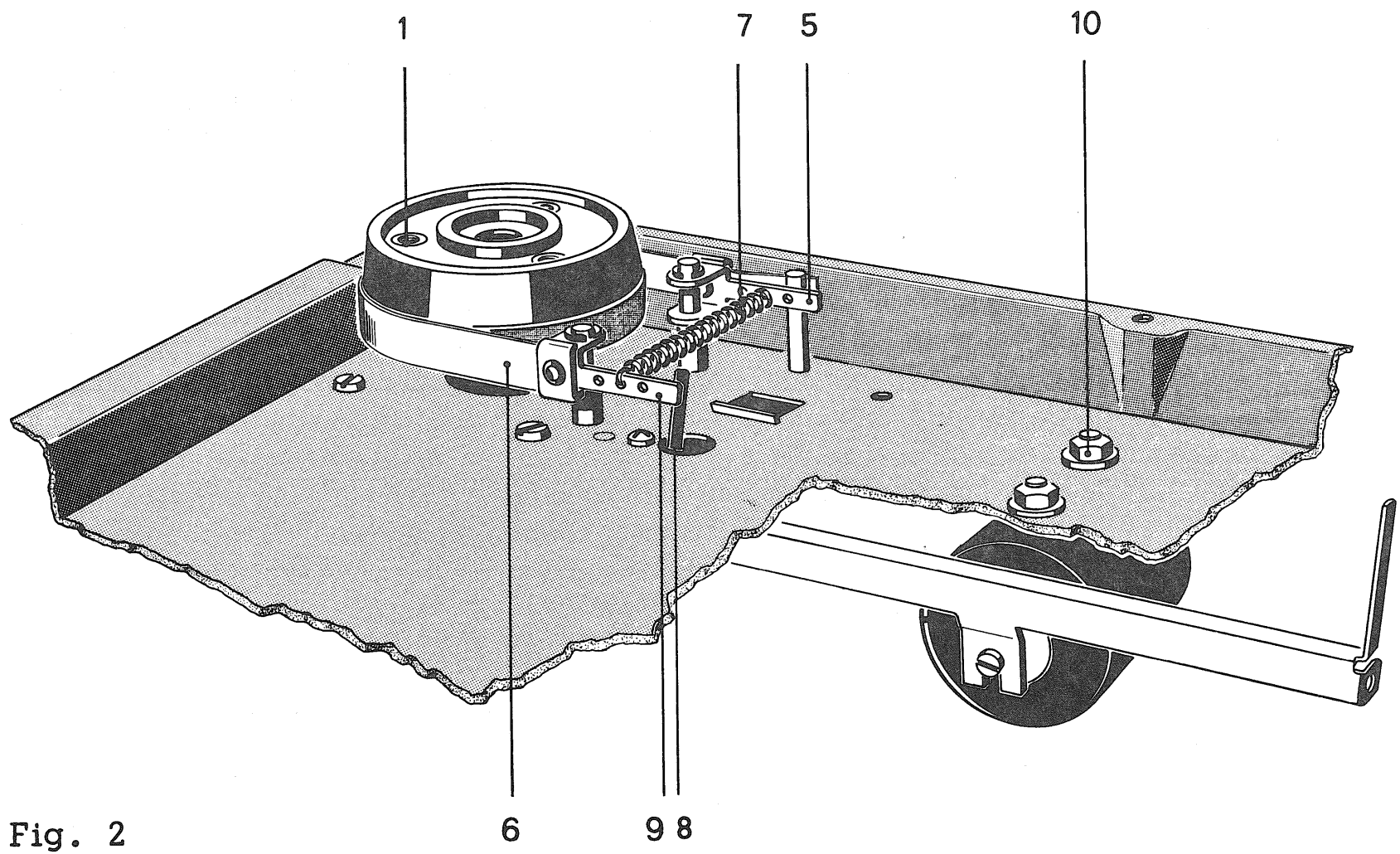
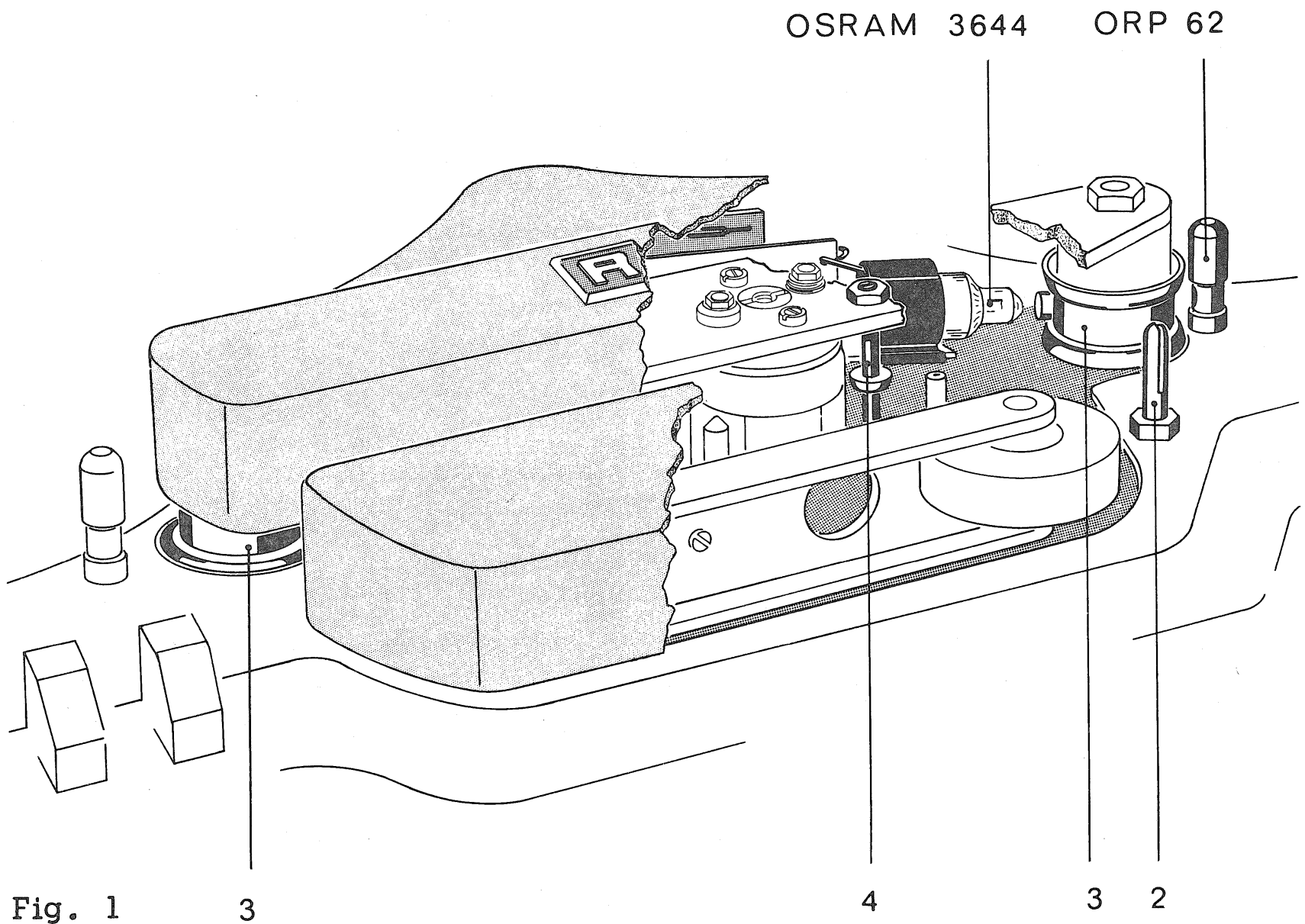
It is advisable to use a full and an empty 10 1/2 inch spool when carrying out adjustments. For the majority of tape transport checks, it is essential to keep the plastic top cover in position. For other mechanical adjustments the top and head covers should be removed. To remove the plastic top plate, pull off the grey control knobs, the transparent selector discs and the plastic cover over the pinch-roller arm. Further undo the mounting screws (1 in fig. 2) of both turntables, of the head cover and the mounting lugs (2 in fig. 1) of the pinch-roller cover. When reassembling, take great care in tightening the turntable screws uniformly to prevent them from wobbling. For best results, they may have to be rotated by 120°.

2. 1. 1. Tape path

The tape path level is determined by the left and right hand tape guides (3 in fig. 1) and by a small guide (4) positioned between the playback head and the capstan. We do not recommend that these guides should be interfered with in any way. Adjustment to the spool carrier height can of course be made to enable the tape to be wound centrally between the spool flanges. This is brought about by sliding shim-washers of varying thickness onto the spooling motor shafts after removal of the bakelite brake drums. To pull a brake drum off the shaft, screws should be inserted into the three tapped holes (1 in fig. 2) so as to serve as " handles ". Care should be taken to prevent damage of the brake bands at this stage. Where a brake drum has to be removed it is recommended that the brake band be removed first.

2. 1. 2. Brakes

The layout of the brake system is shown in fig. 2. The mounting bracket (5 in fig. 2) on the rear end (stationary) of the brake band must be held tight against the vertical pin on the chassis by sufficient tension of the leaf-spring on the bracket.



It is important to check that the brake band (6) is running flat on the brake lining and not biting on the upper or lower edge. Adjust alignment of brake band by slightly pivoting it in the rivets if required.

Correct tension for spring 7 is obtained when 160-220 grams applied as a tangent force to a 10 cm diam (spool and tape) causes the spool to move. See fig. 3.

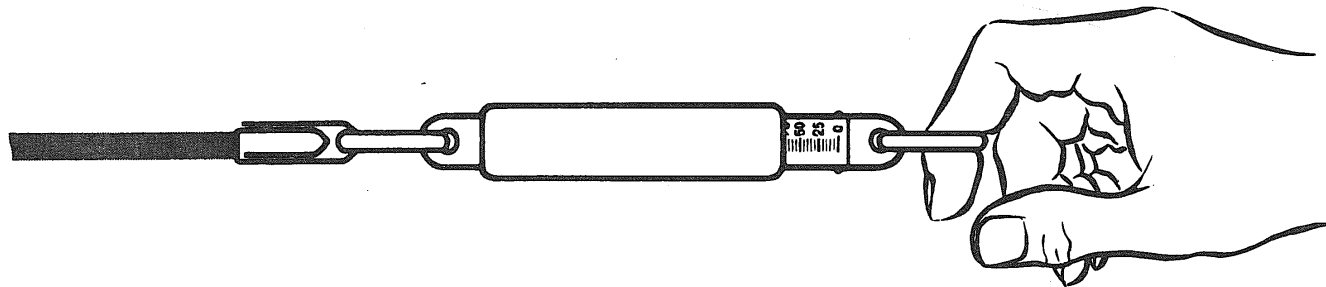


Fig. 3

Brake tension may be altered by resetting the brake return spring (7) into any of the three holes on the end-brackets (5 and 9). The brake release solenoid must cause sufficient movement (approx. 3 mm) of the front-end bracket (9) to fully free the brake band from the lining.

Depress the "stop" and "play" buttons simultaneously to energize the brake release solenoid. If the movement is incorrect, loosen the nuts (10) and re-position the solenoid. The front-end brackets of the brake bands may be bent to achieve simultaneous release of both brakes.

The brakes should be kept clean and dry. Do not use any oil or grease on the linings.

2. 1. 3. Tape tension

Back tension is applied by the combination of reverse direction torque from the feed motor and the degree of wrap around on the LH guide pin. Wear on the mechanical parts of the recorder will not alter the amount of tape tension. Any effects that could be attributed to inaccurate tape tension may be caused by :

- a. Faulty adjustment of the brake band
- b. Electrical fault in feed motor
- c. Electrical fault in phase shift-condenser (C 72 pos. 22 in fig. 5 and 6).

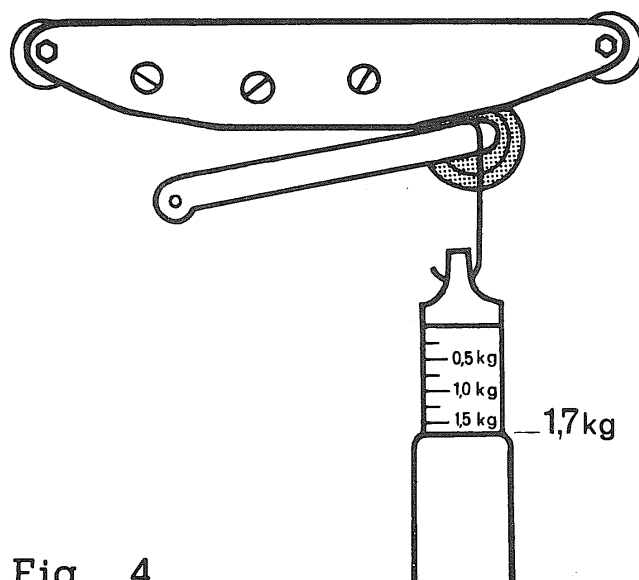


Fig. 4

2. 1. 4. Pinch roller

The pressure of the pinch roller can be measured by a gauge fixed to the pinch roller arm as close as possible to the spindle of the pinch roller (fig. 4). A constant tone tape should be played and the pinch roller withdrawn by the gauge until the note is heard to change. A reading in the region of 1,7 kg should be obtained, Adjustment to this value can usually be obtained by turning nut no 13 in fig. 5. Should this not provide the necessary amount of correction it is advisable to check the position of the solenoid no 11 in fig. 5 which will be correct when there is approx. 0.5 mm clearance at point A (fig. 5) with the solenoid energized. It is essential that the solenoid's slug fully bottoms in the energized position and when properly adjusted, there should be no movement of the slug when lifting the pinch roller off the capstan. Correct setting can be obtained by loosening the nuts (12 in fig. 6) and moving the solenoid in the required direction.

2. 1. 5. End of tape switch

A. Photoelectric end -of-tape switch

Recorders with serial numbers from 58 000 onwards are equipped with a light sensitive auto shut-off device. It consists of a light source (Osram 3644), the photoresistor ORP 62 and a printed circuit section containing two transistors (see fig. 1).

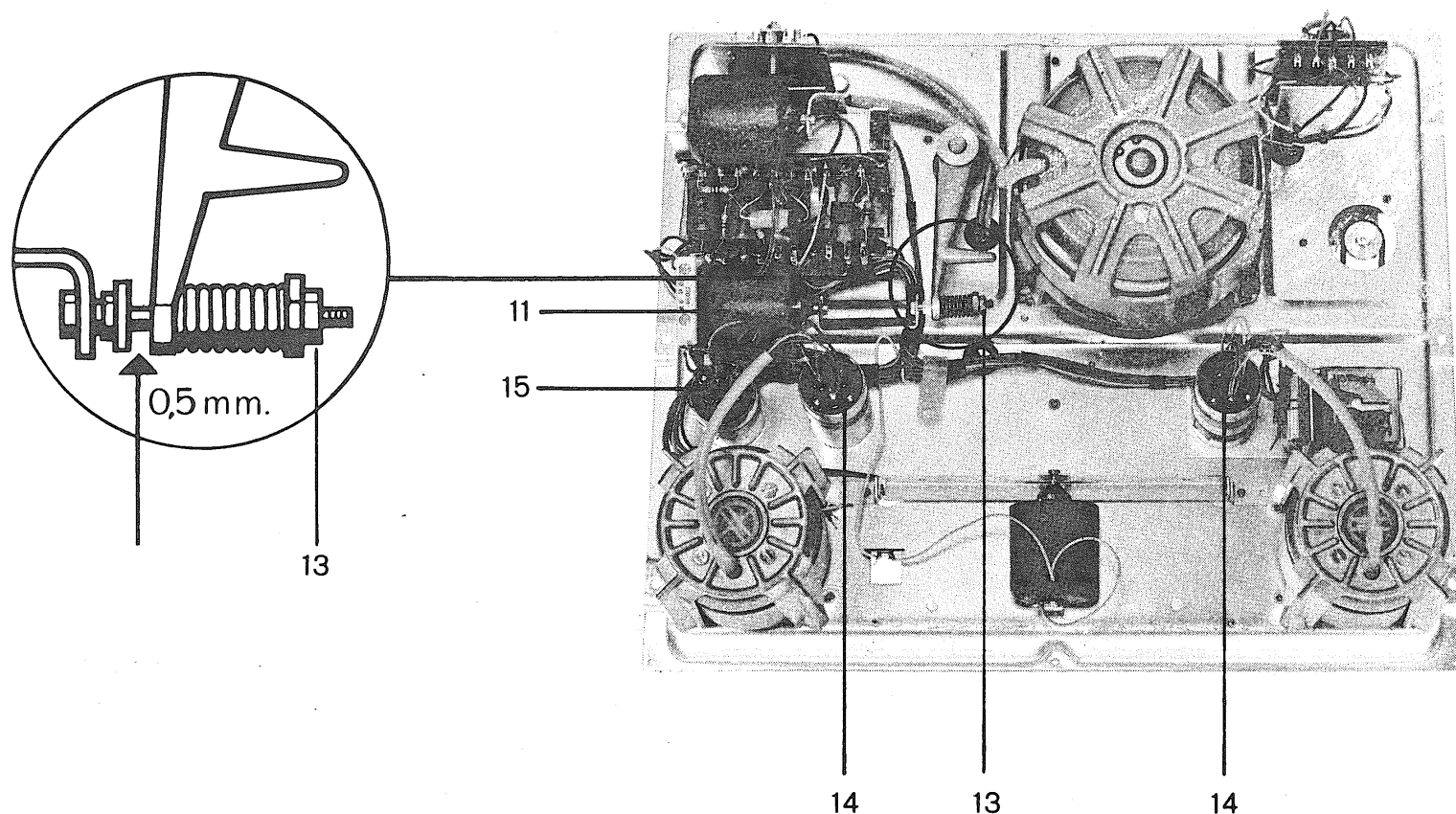
The photoconductive cell is housed in the tape guide pin on the right hand side of the recorder. It has a dark resistance of greater than 100 k Ω and this value drops to below 3300 Ω under illumination. The associated current amplifier energizes the push button release solenoid when light reaches the photoconductor. For normal operation of the recorder the sensing element is at its high dark resistance and both transistors are biased into cut-off. Illumination of the photoresistor changes the bias condition on T1 thereby raising its collector current. A voltage drop develops across the solenoid winding and T2 begins to conduct. Since T2 opens a current path parallel to the photoconductor, positive feed back action sets in which causes the collector current of T1 to rise quickly into saturation.

To de-energize the solenoid and to restore the nonconducting condition, the supply voltage has to be interrupted.

B. Mechanical end-of-tape switch.

This switch and its associate operating levers must be thoroughly clean to function correctly. On G-36 recorders up to serial number 36 500, the tape sensing lever operates a snap-action switch (SE schematic A) which is closed with tape tension applied. The right position of the switch assembly is essential for correct operation to be obtained. This adjustment is carried out by slackening the fixing screws and moving the switch bodily until the snap-action switch closes when the sensing lever still protrudes by 0,5 to 1 mm from the outer diameter of the tape guide.

On recorders with serial number 36 500 and up, the sensing lever operates a gold-plated wire contact. This switch opens when tape tension is applied (see SE in schematic B and 7.736.001-002). Adjustment should be carried out analogue to the above specifications for the snap-action switch by bending the long wire loop. In the resting position sufficient contact pressure should be available to make the short wire loop move beyond the point of contact by approx. 0,5 mm. This is achieved by bending the contact wires while operating the tape sensing lever by hand.



The end-of-tape switch and its operating lever are then properly adjusted when the switch remains open (or closed on older models) for any movement of the sensing lever inside the tape-guide post. Accidental tripping due to sticky splices etc. will thus be avoided.

2.1.6. Wow and flutter

Accurate and useful measurement of wow and flutter can only be made with an appropriate instrument. The recorder is calibrated using the EMT Model 420. Possible causes of flutter may well lie with the capstan, capstan motor. Wow can usually be seen as associated with the pinch roller speed and in some cases a faulty pinch roller may be the cause, and in others too much back tension or insufficient pinch roller pressure. For all wow and flutter investigations the transport mechanism must be completely clean.

2.1.7. Tape speed

Tape speeds can be checked by running a marked, measured length of tape through the recorder. For a 100 sec. run 950 cm would be required at 3 3/4 ips and 1905 cm at 7 1/2 ips. The difference in running time in seconds will be the speed variance as a percentage. Some variance can be expected with temperature increase but this should lie within the quoted tolerance. In very cold weather it may be noted that the recorder runs accurately at 3 3/4 ips but slows down when switched to 7 1/2 ips. This is due to drag from the cold grease in the capstan bearing, especially when new. After a short time of operation at 3 3/4 the machine should be capable of running at 7 1/2 ips.

When detecting any deviations from the figures quoted, an accurate reading of the mains frequency should be taken first before investigating pinch-roller pressure, brakes etc. On a 50 cycle power line, a drop to 49,5 cycles will make the recorder run slow by 1% and this should be borne in mind when checking equipment with a specified accuracy of + 0,3 percent.

2.2. Routine maintenance

2.2.1. Cleaning

From time to time the working parts of the recorder which come in contact with the tape should be thoroughly cleaned. Cleaning of the head faces is particularly important, especially in the case of four track heads where seemingly invisible particles can often have an adverse effect on performance. On no account must any deposits be scraped off with metallic tools. Loose tape dust, may be brushed off. For cleaning of the heads and capstan shaft, use a cotton-swab soaked with methylated spirits. (Avoid any solvents from coming into contact with the plastic parts of the recorder).

2.2.2. Lubrication

The capstan motor, the capstan bearing and the wind motors are equipped with bearings of sintered material. Each bearing has an adequate supply of lubricant which should last for the life of the bearing. Should the replacement of a motor bearing become necessary, return the unit to the nearest REVOX Repair Station. On wind motors with ball bearings (Series I and II) it is advisable to replace the ball bearings once their supply of lubricant has been used up. Felt linings are to be saturated with Teresso 43 (Esso).

If signs of wear become visible on the capstan shaft, the whole bearing plate complete with shaft should be replaced (see sect 2,3). Lubrication of the capstan bearings is not anticipated. However, where this can not be avoided, Teresso 43 (Esso) only must be used.

2.2.3. Servicing of solenoids

When it appears that a solenoid is tending to stick or function erratically, it should be dismantled and the slug and housing thoroughly cleaned with methylated spirits. When both parts are properly clean and dry, molybdenum grease may be rubbed into the working surfaces, which must finally be wiped dry before re-assembly.

2.2.4. Servicing of push button assembly

Conventional switch cleaners are not recommended for the high current spring contacts used in the REVOX, and where cleaning is necessary, the contacts should be polished clean. The interlocking bars and push-button shafts may require occasional greasing with molybdenum grease. Where a part of the assembly needs replacement, unscrew the four fixing screws, bend the pushbuttons to the right and ease the unit to a better working position. For better access to the switch assembly, the housing of the pinch roller solenoid should be removed by undoing the M 4 nuts (pos. 12 in fig. 6).

2.3. Removal of capstan assembly

This may become necessary where the recorder is to be used on a mains frequency which differs from that for which the recorder was manufactured, or when replacing the capstan assembly becomes necessary.

Having removed the chassis, as described in sect. 2.1. from the cabinet and the loudspeaker and panel, separate upper and lower chassis sections by undoing screws no 16 shown in fig. 6. Lift upper chassis without exerting excessive force, if necessary loosen the fixing screws of the selector switches (18 in fig. 6) to gain more freedom of movement.

Unscrew the capstan mounting nuts (19 in fig. 6) and remove the assembly downwards and forwards out of the chassis. The fixing screws 20 in fig. 7 on the flexible coupling are to be removed through the large holes in the capstan bearing plate. The motor mounting screws (21 fig. 7) should now be removed using REVOX's special 8 mm nut driver, after which the flywheel assembly can be separated from the motor.

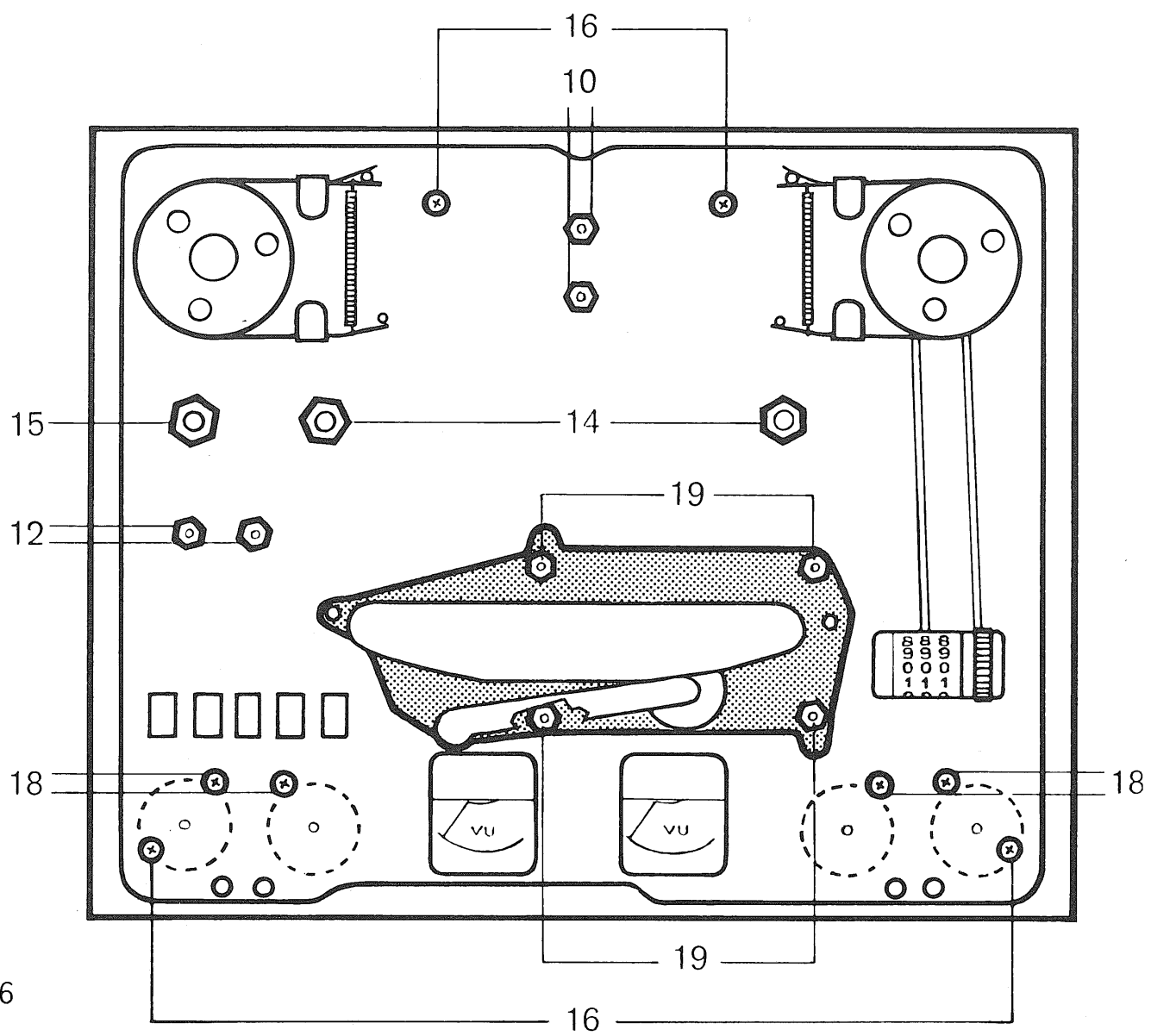


Fig. 6

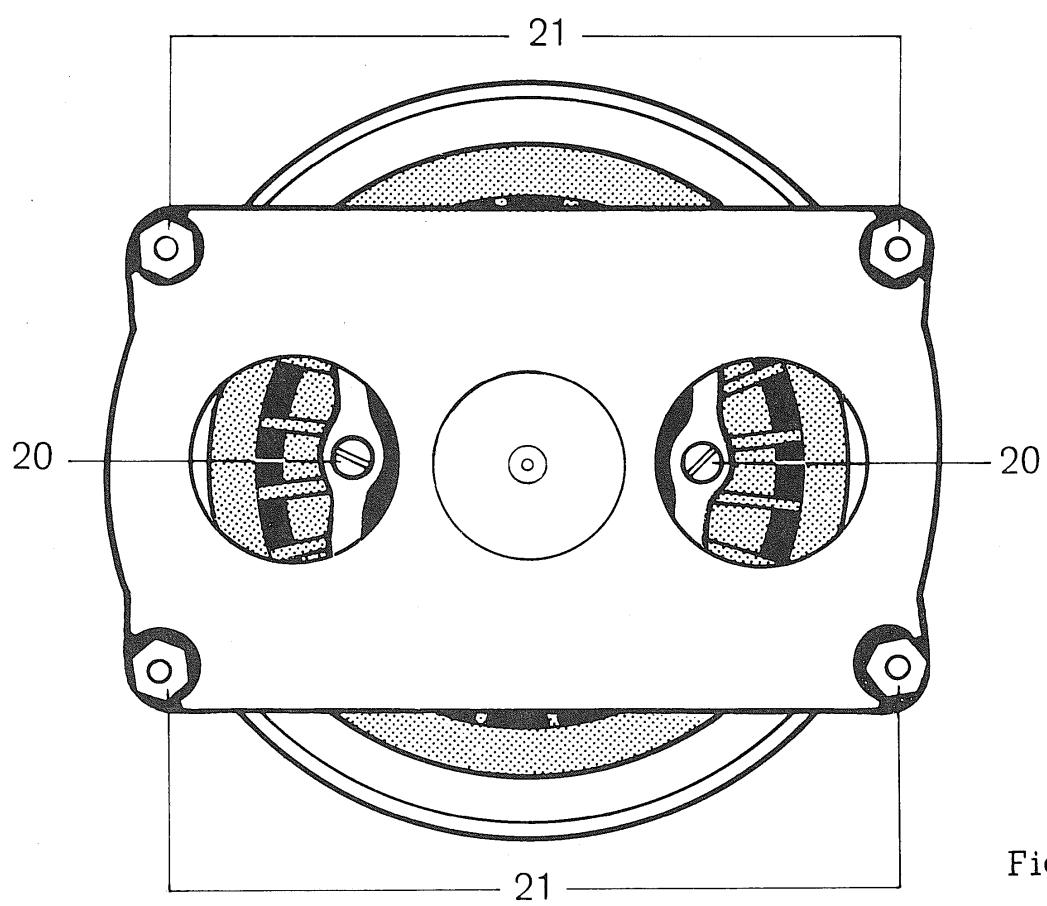


Fig. 7

If the capstan bearings are worn, the whole bearing plate complete with capstan shaft is to be replaced. The flywheel can be pulled off the shaft after removing the large hexagonal nut. Where replacement of the capstan shaft only is required, this can be accomplished by removing the true arc ring, which is accessible behind the flywheel. Do not top-up the supply of lubricant. When replacing the lubricant, first wash bearings thoroughly with oil, then refill with calypsol D 5.

To remount the assembly, the reverse procedure should be adopted.

Important :

When adapting a 50 Hz recorder for operation on a 60 Hz power line (or vice versa), the capstan shaft as well as the phaseshift capacitors for the capstan motor (15 in fig. 5) and the spooling motors (14 in fig. 5) have to be exchanged.

	50 Hz	60 Hz
2 Capacitors for spooling motors (C 71 & 72)	3,5 μ F	2,5 μ F
1 Capacitor for capstan motor (C 70)	2,5 μ F	1,5 μ F

(Above values are valid only for recorders that were originally manufactured for 50 Hz operation)

For 60 Hz operation, the supply point N1 (see schematic) is to be moved from the 220 V tap to the 240 V tap on the voltage selector.

Conversion kits for 60 Hz operation and NAB equalization are available from any REVOX representative.

3. Electronic Description

Access to the majority of the electronics of the recorder can be obtained by removing the base of the recorder. The REVOX G-36 has two identical record- and replay-channels. The common bias and erase Oscillator can be switched onto either one or both channels, thus allowing stereophonic recordings, two-track sound with sound and monophonic recordings. Each channel is equipped with pre-amplifier stages to accept low-level signals from linear high-impedance sources. (Step-up transformers are required where low-impedance dynamic microphones are being used.) For monitoring the signal level, the recorder is equipped with two VU-meters and associated matching amplifiers. The built in power amplifier drives a 21 cm Ø loudspeaker and an appropriate switching arrangement permits listening to either one - or both channels, before and after tape.

3. 1. Circuit checks and adjustments

3. 1. 1. Measuring instruments

The following items are essential :

- a) 10'000 Ω/V DC Multi range meter
- b) VTVM with min. sensitivity of 3 mV full scale
- c) Low distortion audio generator
- d) Appropriate calibration tape (use "REVOX Bezugsband" or "Bezugsband" 19 DIN 45513" both of which have a frequency response corresponding to the G-36 equalization characteristic)

Where a test tape with response characteristics of the recorder under examination is not available, other test tapes may be used and a set of correction figures for the individual frequencies can be obtained from the following equation :

$$\Delta A = 10 \lg \frac{1 + \omega^2 \tau_2^2}{1 + \omega^2 \tau_1^2} \text{ (db)}$$

valid when $\tau_2 > \tau_1$

τ_1 and τ_2 designate the time constants of the equalization characteristics.

Other desirable, but not essential instruments include a Distortion Factor Meter and an Oscilloscope.

Direct record and replay figures can only be taken when a suitable bias filter is connected between the output of the recorder and the measuring instrument.

An external filter will not be necessary for those REVOX G-36 Recorders which are already equipped with the bias-suppression circuit (printed circuit with L3, L4, C 48, C 76, C 77, C 78, R 112 and R 113 on amplifier chassis to the left of P1, see fig. 14 and schematic G-36) provided that the residual RF-signal is at least 35 db below peak record level (3% distortion).

A wow- and flutter meter may be required in rare instances only.

3. 1. 2. De-magnetising

From time to time the ferrous parts in contact with the tape may become magnetised. When this occurs, especially with head magnetisation, an increase in background noise will be evident and in serious instances, partial erasure of the tape may come about. De-magnetisation should be carried out with the appropriate instrument at frequent intervals and care should be taken at all times to ensure that magnetised

tools do not come in contact with the head assembly. Permanent damage may be caused to a calibration tape by magnetised sound heads, as they will tend to partially erase the high frequencies on the tape. They may also have some adverse effects on the overall performance of the recorder.

3. 1. 3. Head alignment

Head adjustment should only be necessary when a head requires replacement or where the setting has been interfered with.

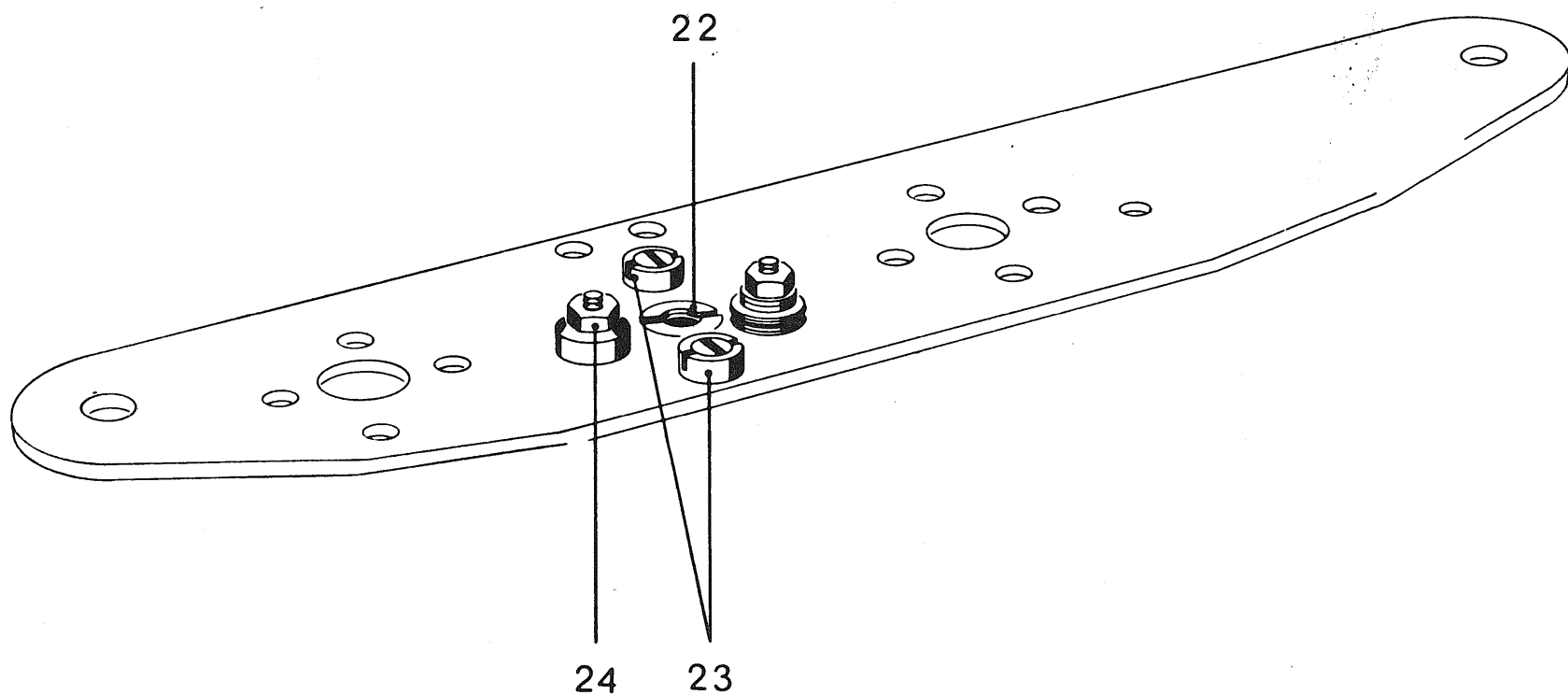


Fig. 8

Five adjustment screws are provided, their functions are as follows :

The centre screw no 22 must be undone to remove the head or to adjust the head around the vertical axis. Adjust screw no 23 at the rear of the head for height, which will be correct when the upper brass spacer of the heads is divided by the upper tape edge. Front screw no 23 should then be adjusted to bring the head face vertical with the tape. Azimuth adjustment must be carried out by turning nut no 24.

Azimuth adjustment of playback head

Good high frequency response is possible only when the gaps of the record- and playback heads are parallel to each other. Where recordings are to be exchanged for re-playing on other machines, it is furthermore essential that the head gaps are accurately aligned to an angle of 90° against the direction of tape travel.

Correct adjustment is achieved by proceeding as follows :

- connect VTVM to the output of one channel
- run alignment tape and adjust nut 24 until a maximum reading is obtained von the VTVM (observe the instructions included with the tape)

When correctly aligned, a sharp maximum will be indicated and the signal level must drop when turning nut 24 in either direction.

Azimuth adjustment of record head

It is essential that the playback head has been aligned as outlined above.

- record 12 kc/s on good quality blank tape
- with the output coupled to a VTVM nut 24 of the record head should be adjusted to give maximum output from the tape.

It is of little significance which of the two channels is used for carrying out the azimuth adjustment, however, it is advisable to check the performance of the other channel also.

Head adjustment by the phase check method

The azimuth position of the head gap on stereo tape recorders influences not only the signal level at high frequencies, it also effects the phase relation between channels. The criterion of minimum phase deviation provides a more accurate indication of correct gap angle than the adjustment for maximum output level.

To avoid a phase angle error of 90° , the azimuth should first get aligned by adjusting for level maximum.

A simple method for adjusting phase can be seen from the diagram fig. 9. Both channels are connected in parallel and azimuth adjustment is carried out at a test frequency of 10 kc/s to give maximum output from the tape. Where a double beam oscilloscope is available this should be employed so that traces from both channels can be observed simultaneously. Accurate azimuth alignment will permit phase to be maintained between channels at all frequencies, when correctly aligned a change of frequency will not affect the locking of phase between channels.

To adjust the record head ensure that playback head is correct. Using the playback channel as a measuring reference, a signal of 10 kc/s should be recorded and the record head adjusted to give maximum playback output. Again the phase check method may be employed and this will have the effect of phasing the machine from input to output via tape at all frequencies.

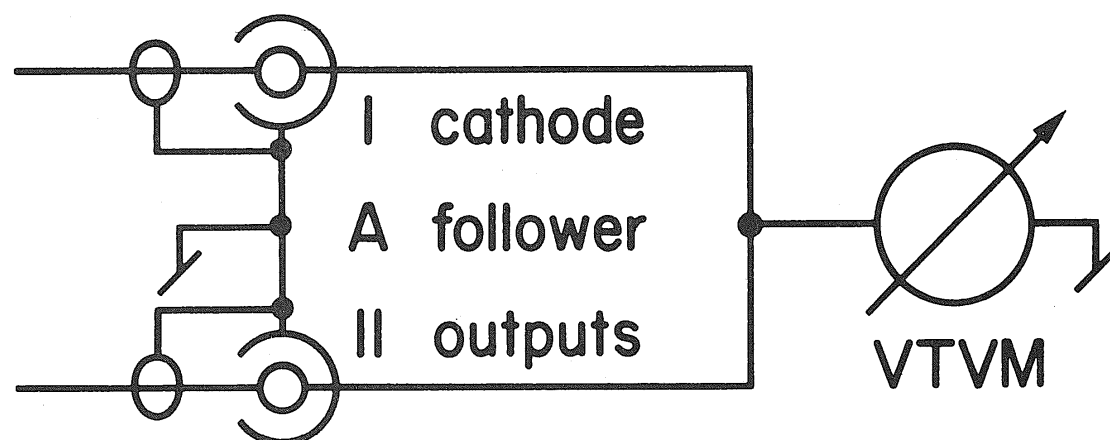


Fig. 9

Adjustment of four track heads

This is a highly delicate operation as with a track separation of only $3/16''$, slight inaccuracies in head alignment cause a track overlap and lead to the very annoying "dead channel" cross-talk.

Where a four track recorder is under examination, it is advisable to obtain the REVOX four track alignment tape.

Relevant instructions are included with the tape.

3. 1. 4. Playback amplifier

Before any tests are made on the playback section of the recorder, it is essential to ensure that the sound heads are scrupulously clean; minute particles may cause false readings by partially lifting the tape off the heads.

Connect a VTVM to the cathode follower output of each channel in turn. A reference signal recorded at 32 millimaxwell per 1 mm of tape width should give an output of approximately 3 db below that specified in the technical data (refer to 5.). The frequency response section of the calibration tape is normally recorded 20 db below this level for measuring the performance characteristics of the playback channels.

A response of + 2/-3 db referred to the level at 1 k c /s is acceptable. Where unsatisfactory figures are obtained it is advisable to replace the playback head as outlined in 3.1.3. and take new readings. Should this not bring about the desired improvement, the playback pre-amplifier should be examined. Remove the earth connection of the playback head and insert a 10 Ω resistor in series (fig.10.)

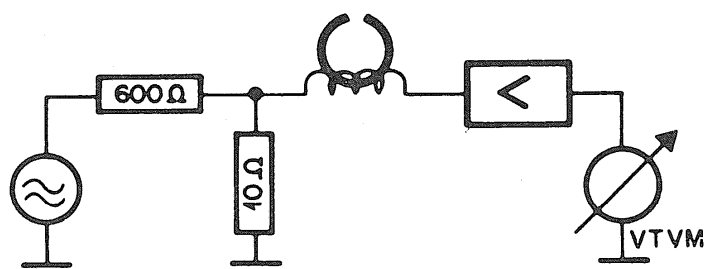


Fig. 10

Connect an audio generator across the resistor and adjust output at 1 k c/s to give 70 m V at the cathode follower. The frequency response obtained should coincide with the graph shown on the back of the respective circuit diagram.

Where a considerable deviance exists, checks should be made on the voltage values obtained within the circuit with special regard to the negative feedback loop which is frequency conscious.

3. 1. 5. Bias adjustment

The procedure is described for one channel only. It is to be carried out in both channels for achieving identical performance.

Connect a VTVM with a bias filter (described in 3.1.1.) in circuit to the output of the playback amplifier. Press the record button, leaving the record level control closed, and tune the filter for minimum indication on the VTVM. This external filter will not be required on REVOX G-36 recorders already equipped with bias-traps. It must be observed, however, that the residual bias remains below the level specified under 3.1.1.

Where a filter is not available, the overall performance can not be tested while recording, as bias leakage masks the audio signal. It will be necessary to take all readings after first recording, rewinding and then playing the tape again.

Any alteration of the bias current changes the remanent tape flux and consequently effects output level, frequency response and distortion. As no two heads can be made to perform exactly alike, there is little value in measuring the bias current alone and directly. In adjusting the bias current, all of these variables are taken into consideration and the near optimum value has to be found first before the frequency response tests can be commenced with.

The recommended procedure is to employ a long playing tape of compatible quality and record a 1 kc/s signal approx. 3 db below full modulation at the 3 3/4 ips tape speed. The bias should be adjusted with P 10 and P 11 (fig. 14) for channels I and II respectively, for maximum audio output.

The generator signal level should then be reduced bei 20 db and the output level noted. After changing the frequency to 10 kc/s, bias should be adjusted to an output identical to that at 1 kc/s.

3. 1. 6. Measurement of overall frequency response

Before any attempt is made to verify the overall response, it is advisable to see that all tests described in the preceeding paragraphs have been properly observed and that the settings arrived at have been left undisturbed.

A 1 kc/s signal should be recorded via the radio input socket at reference level, viz: the same output voltage should appear on the cathode follower as from the reference level of the calibration tape. The level of the signal should then be attenuated by 20 db and the "overall" response curve taken. It is essential for this test that the signal level is some 25 db below peak record level (3% dist) otherwise the record pre-emphasis may lead to tape saturation at high frequencies thus producing false test results.

Where the frequency response deviates from the specified tolerance of $+2 / -3$ db, a slight re-adjustment of the bias current may be necessary. Any variation in bias has a pronounced effect on the frequency response.

If a fault is suspected to lie in the record section of the recorder, the record head should first be changed. If this does not prove to be the cause of the trouble the response curves of the amplifier should be checked with the bias oscillator valve removed.

To measure the response characteristic of the record pre-emphasis use a test circuit as shown in fig. 12.

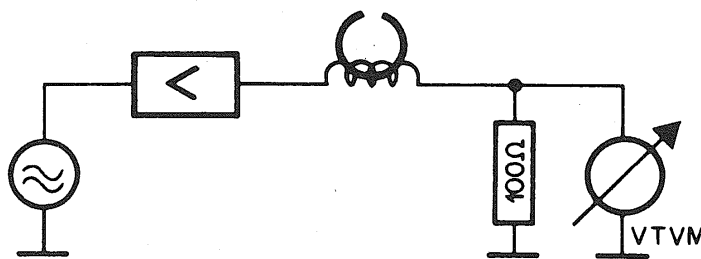


Fig. 12

The frequency response obtained should coincide with the graph shown on the back of the respective circuit diagram. Considerable deviations would indicate valve aging, or faulty components in the frequency conscious networks of the record amplifier.

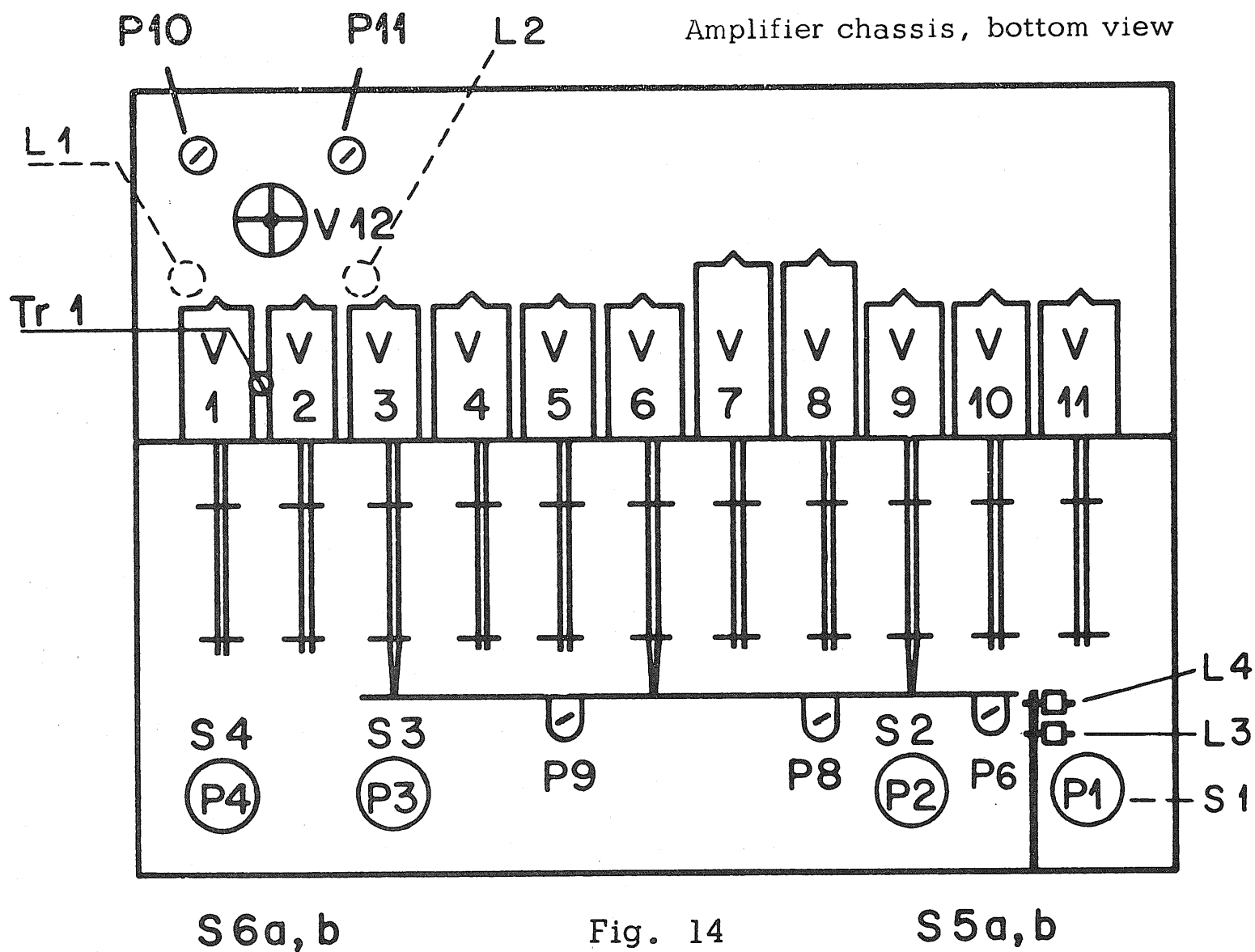


Fig. 14

3. 1. 7. VU-Meter adjustment

Peak record level is defined as the level at which the signal contains 3% of third harmonic due to tape distortion. This should correspond to an output level approx. 3 db above the reference level of the calibration tape.

Where a distortion analyser is available, the alignment procedure is as follows :

Record a 1 kc/s signal via the radio input with the record level control wide open and adjust generator level until a distortion factor of 3% can be measured on the cathode follower output. A "lead" (higher sensitivity) of 7 db is required on the VU-Meter to compensate for its ballistic characteristic. The generator level should now be attenuated by 7 db and the trimpot on the meter amplifier adjusted for 0 VU-indication on the meter. Adjustment is made with the trimpots P 8 and P 9 (fig. .14) for channel I and II respectively.

Lacking a distortion analyser, a reasonably accurate alignment is possible by the following method :

Note the output level produced from the reference section of the calibration tape. Record a signal of identical frequency, adjusting the input level until a level 4 db below reference level appears on the cathode follower output. Now set the trimpots of the meter-amplifiers to obtain a 0 VU reading on the meters.

3. 1. 8. Adjustment of head shielding

This may sometimes be necessary in order to keep the operating hum levels at a minimum. It should be noted also that since hum can be picked up by the electronics on the underside of the recorder, care must be taken to screen the base when the chassis is removed from its case, whether on the service bench for attention, or when built into a cabinet.

To adjust the playback head shield, place two spools on the recorder with a half reel of tape wound on each and without threading the tape depress the play and stop buttons. The tape should remain stationary and the head shield may be adjusted to give the lowest reading on a milli voltmeter connected to the cathode follower output. If two meters are available it is advisable to check both channels simultaneously since an improvement in one may bring about a deterioration in the other.

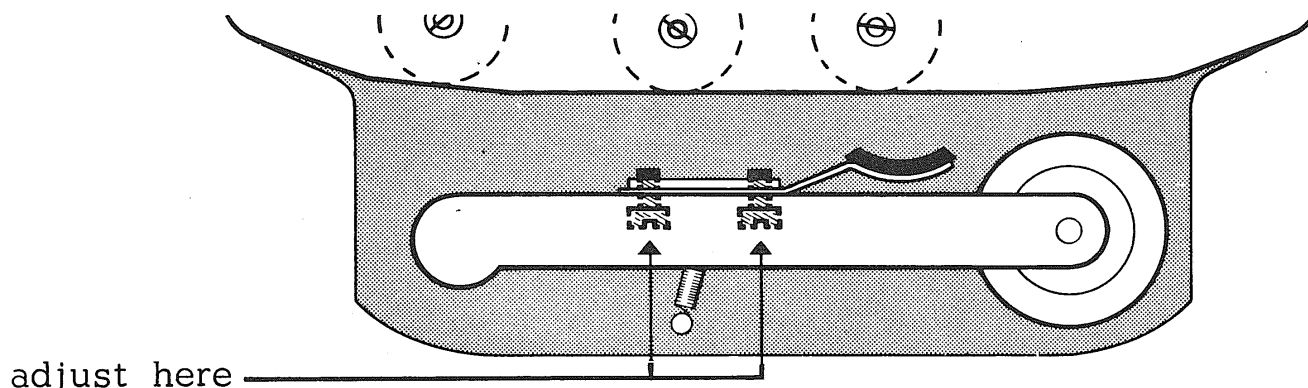


Fig. 15

3. 1. 9. Channel to channel crosstalk

Certain physical limitation prevent one from achieving infinite crosstalk rejection. A crosstalk figure of 50 db can be reached in practice and is generally considered acceptable.

It may however still be irritating in such cases where extreme level differences exist in the recordings of adjacent tracks.

When checking crosstalk, one should never listen to the "dead channel" with a wide open monitor gain. Depending on the reserve gain available in the monitor system, the slightest amount of crosstalk will thus become audible. Crosstalk behavior can be judged by exact measurement only.

To adjust the recorder for minimum crosstalk a reference recording at full modulation (preferably music) is required on one track only. While making this test recording it is important that the bias and audio signals are inoperative on the other channel. (Channel-selector in position I or II respectively, level control of the unused channel closed). After re-winding, the recorded section is to be replayed while monitoring the unrecorded track. By adjusting trimmpot P6 (fig.14) reduce any audible crosstalk until a minimum is reached. The optimum setting for P6 is found by repeating the above procedure with a recording on the other track.

3. 2. Tuning the bias traps

The following procedure is suggested for tuning the filters L 1/T 855 and L 2/T 855 (see schematic G 36, 6) on the output of the stages V 5,1 and V 5,2 :

The record circuits of both channels should be switched on by depressing the buttons "record" and channels I + II (stereo), causing the oscillator (V 12) to generate 70 kc/s. The record level controls P 3 and P 4 remain closed. A VTVM or oscilloscope with a sensitivity that assures useful deflection at 1 mV 100 kc/s should be connected to pin 1 on the socket of V5 (Plate, Channel I) and the slug of L 1 (Fig. 14) is to be tuned for a minimum reading. After connecting the VTVM or oscilloscope to pin 6 of the same socket (Plate, Channel II) the slug of L 2 should get tuned analogue to the above.

Tuning of the bias filters on the cathode follower outputs V 9 and V 11 (not obtained in the early version of the G-36) :

The record circuits should be turned on as described above. With the VTVM or oscilloscope connected to the cathode follower outputs A - K I and A - K II the slugs of L 3 and L 4 (Fig. 14) respectively should get tuned for minimum indication on the test equipment.

4. Troubleshooting

4. 1. Mechanical troubleshooting

Trouble	Cause	How to repair
Capstan motor does not run at either speed	Speed switch in mid-position	Switch to 3 3/4 or 7 1/2 speed
	Speed switch defective	Replace wafer
	Jamming motor	Clean and lubricate bearings (2.2.2.)
	Jamming capstan bearing	Replace capstan assembly
Noisy capstan	Felt of the lower bearing damaged	Replace felt and lubricate with SAE 20 oil
	Loose flywheel	Tighten fastening nut
	Damaged capstan-bearing	Replace capstan assembly
	Damaged motor bearing	Replace motor
Tape speed too low	Open-circuit motor-winding	Replace capstan motor
	Faulty motor condenser	Replace motor condenser
	Jamming capstan	Replace capstan assembly
Capstan runs at 3 3/4 but not at 7 1/2 ips	Recorder too cold and drag from new bearing or grease too great	Run at 3 3/4 for a few minutes. Recorder will then pick up to 7 1/2 ips
Pinch roller arm does not operate	Dirty solenoid	Clean and adjust solenoid (2.2.3.)
	Dirty contacts in the push-button assembly	Clean and adjust contacts (2.2.4.)
	Dummy-plug of remote control removed	Connect pin 1, 2 and 3 of the remote control socket
Brakes do not release	Dirty brake-solenoid	Clean and adjust solenoid (2.2.3.)

	Dirty contacts in the push-button assembly	Clean and adjust contacts (2.2.4.)
	Dummy plug removed	Connect pin 1, 2 and 3 of the remote control socket
Push-button will not remain in pressed position	End of tape switch does not operate	Adjust (2.1.5.)
	Incorrectly threaded tape	Thread the tape as explained in the instruction manual
End of tape switch does not operate	Dirty solenoid	Clean and adjust (2.2.3.)
	End of tape switch contacts maladjusted	Adjust (2.1.5.)
	Light bulb defective.	Replace light bulb Osram 3644
	Light-port in the right-hand guide pin blocked with tape dust.	Carefully clean the opening.
Wow and flutter	Damaged or dirty pinch roller, pinch roller pressure insufficient, left side brake maladjusted, jammed turntable motor	Replace pinch roller . Clean capstan and pinch roller, adjust pinch roller arm (2.1.4.) adjust brake (2.1.2.) clean and lubricate motor-bearings
Fast rewind or forward to slow	Brake maladjusted	Adjust brakes (2.1.2.)
	Dirty brake solenoid	Clean solenoid (2.2.3.)
	Open-circuit winding in the Turntable-motor	Replace turntable-motor
	Defective motor-condenser	Replace motor-condenser

4. 2. Electronic troubleshooting

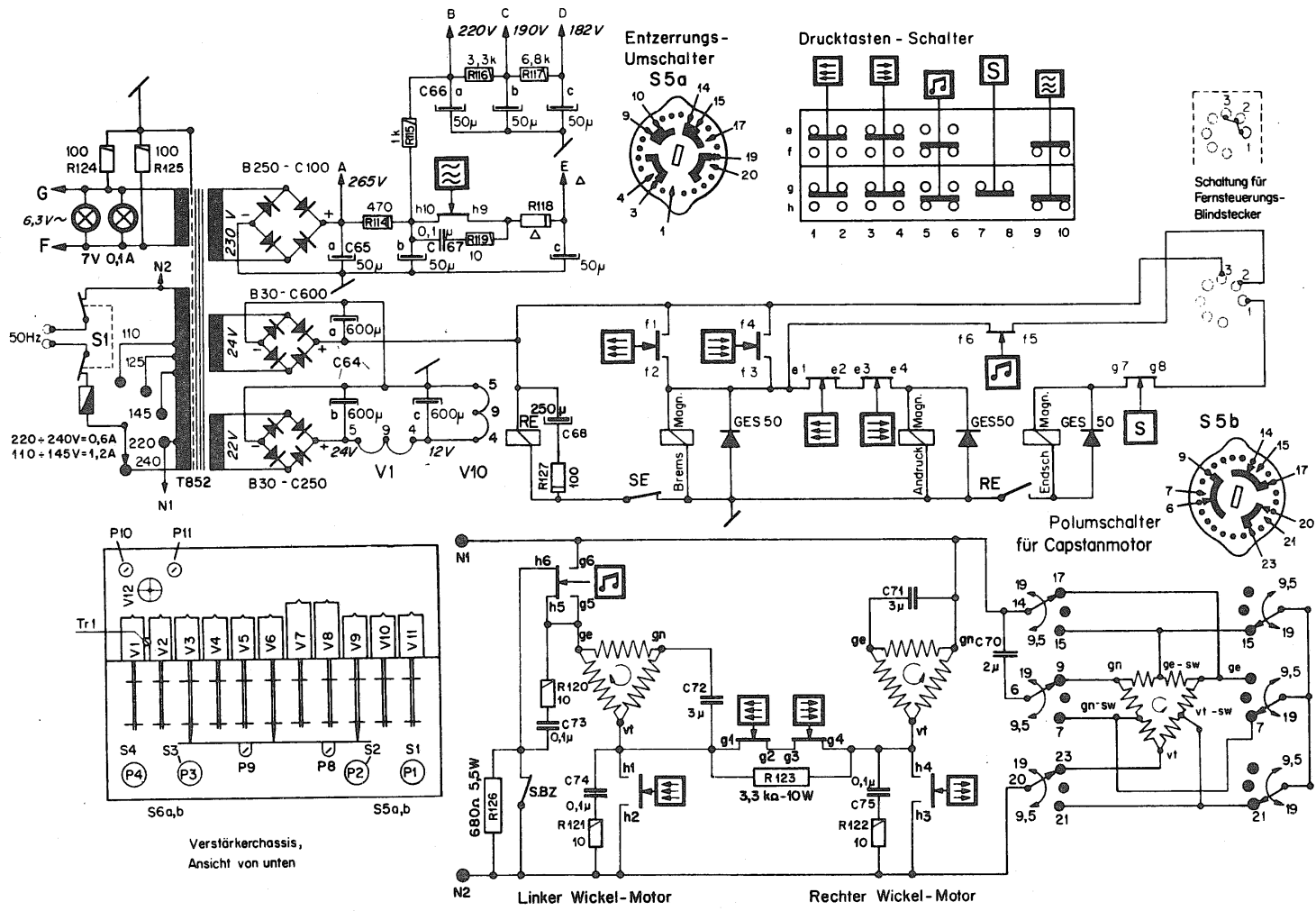
Trouble	Cause	How to repair
Playback hum	Disconnection in the playback head Front shielding of the playback head out of adjustment	Replace playback head ...ing (3.1 2.)

Trouble	Cause	How to repair
Playback hiss	Faulty tube in the playback amplifier	Replace tube
	Magnetised playback head	De-magnetising the head (3.1.2.)
Bad treble response	Dirty head	Clean the heads (2.2.1.)
	Heads out of alignment	Adjust the heads (3.1.3.)
	Worn out heads	Replace heads
	Tape wrongly threaded	Thread tape as explained in the instruction manual
Absence of recording or insufficient recording	Bias incorrect	Adjust bias (3.1.6.)
	Dirty recording-head	Clean the head
	Defective recording-head	Replace the head
	Dirty contact of recording push-button	Clean and adjust contact
	Incorrect bias adjustment	Adjust bias (3.1.6.)
	Defective bias-oscillator	Check bias-oscillator tube, coil and erase head
Insufficient erasure	Erase head soiled	Clean heads (2.2.1.)
	Erase head defective	Replace erase head
	Bias-oscillator defective	Check bias-oscillator tube, coil and erase head
No indication on the VU-meter	VU-meter defective	Replace VU-meter
	Indicator amplifier valve defective	Replace valve
	Maladjusted potentiometer	Adjust level control (3.1.7.)
Short circuit in the power supply	Speed switch of capstan-motor burned out	Replace wafer

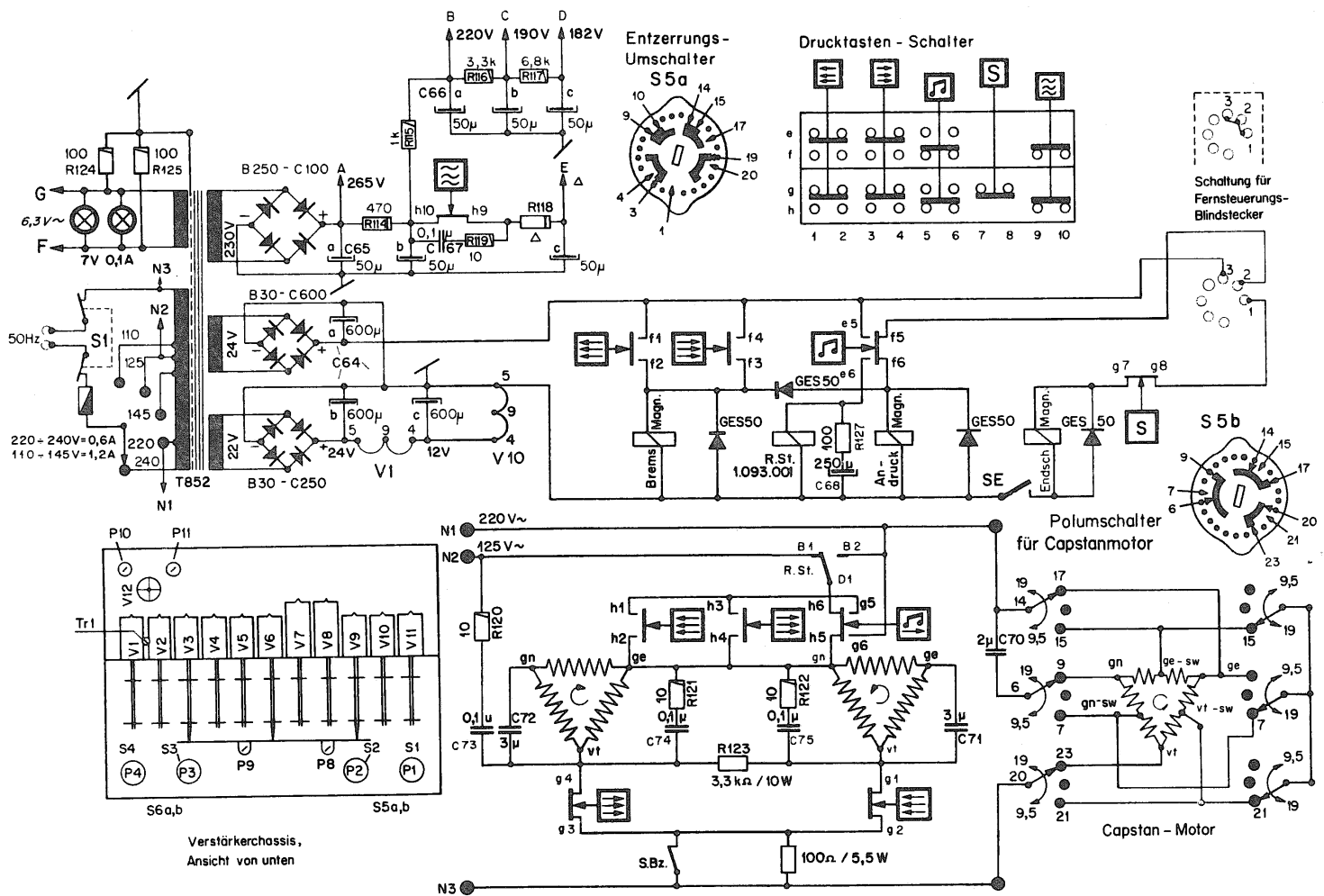
5. Technical Data

Tape speed :	3 3/4 and 7 1/2 ips 6/12 pole Hysteresis Synchronous capstan motor, direct drive
Wow and flutter :	$\leq \pm 0,1 \%$, at 7 1/2 ips peak reading $\leq \pm 0,15 \%$, at 3 3/4 ips weighted (DIN 45507)
Tape speed deviation :	$\leq 0,3 \%$, from nominal
Max. spool size :	10 1/2" (265 mm)
Rewind - time :	120 s for 3300 ft of tape (10 1/2" reels)
Frequency response :	40 - 18.000 c/s at 7 1/2 ips 40 - 12.000 c/s at 3 3/4 ips + 2 / -3 db
Equalization :	in accordance with IEC standards 70 μ s/3180 μ s at 7 1/2 ips 140 μ s/3180 μ s at 3 3/4 ips <u>USA / 60 cps:</u> in accordance with NAB standards 50 μ s/3180 μ s at 7 1/2 ips 90 μ s/3180 μ s at 3 3/4 ips
Harmonic distortion : (overall)	$\leq 3\%$ at peak recording level
Signal to noise ratio unweighted :	2-track recorder 55 db peak record level at 4-track recorder 52 db 3% harmonic distortion
Dynamic range :	2-track recorder : 55 db at 7 1/2 ips 53 db at 3 3/4 ips 4-track recorder : 52 db at 7 1/2 ips at peak record level 50 db st 3 3/4 ips
Crosstalk :	mono 60 db stereo 40 db
Oscillator-bias frequency:	70 kc/s, push-pull oscillator
Inputs per channel :	1. Microphon 3 mV, Ri = 0,5 M Ω max. 600 mV 2. Radio / <u>Tuner</u> 50 mV, Ri = 1,0 M Ω max. 10 V 3. Diode / <u>Aux.</u> 3- 50 mV, Ri = 47,0 k Ω adjustable
Outputs :	2 High Impedance outputs, Eout ≥ 0.7 V (2-track) load resistance not less than 0.1 M Ω Eout ≥ 0.5 V (4-track) 1 loudspeaker output 5 Ω , 6W rms. push-pull power amplifier, internal speaker may be switched off.
Tube complement :	4 x ECC 81, 1 x ECC 82, 5 x ECC 83, 2 x ECL 86, 2 Transistors, 5 silicon diodes, 3 selenium rectifiers
Power line voltage :	110, 125, 145, <u>220</u> and 240 V, 50 cps <u>USA</u> 117 V / 60 cps
Power requirements :	approx. 120 W
Fuses :	for 220-240 V : 0,6 A 5 x 20 mm for 110-145 V : 1,2 A slow-blow <u>USA</u> 117 V : 1,2 A slow-blow Type 3 AG
Weight:	approx. 45 lbs
Case dimensions :	19 x 13 1/2 x 12"
chassis dimensions : (with 10 1/2" reels)	21 3/4 x 15 1/2 x 10 3/4"
Colour :	gray

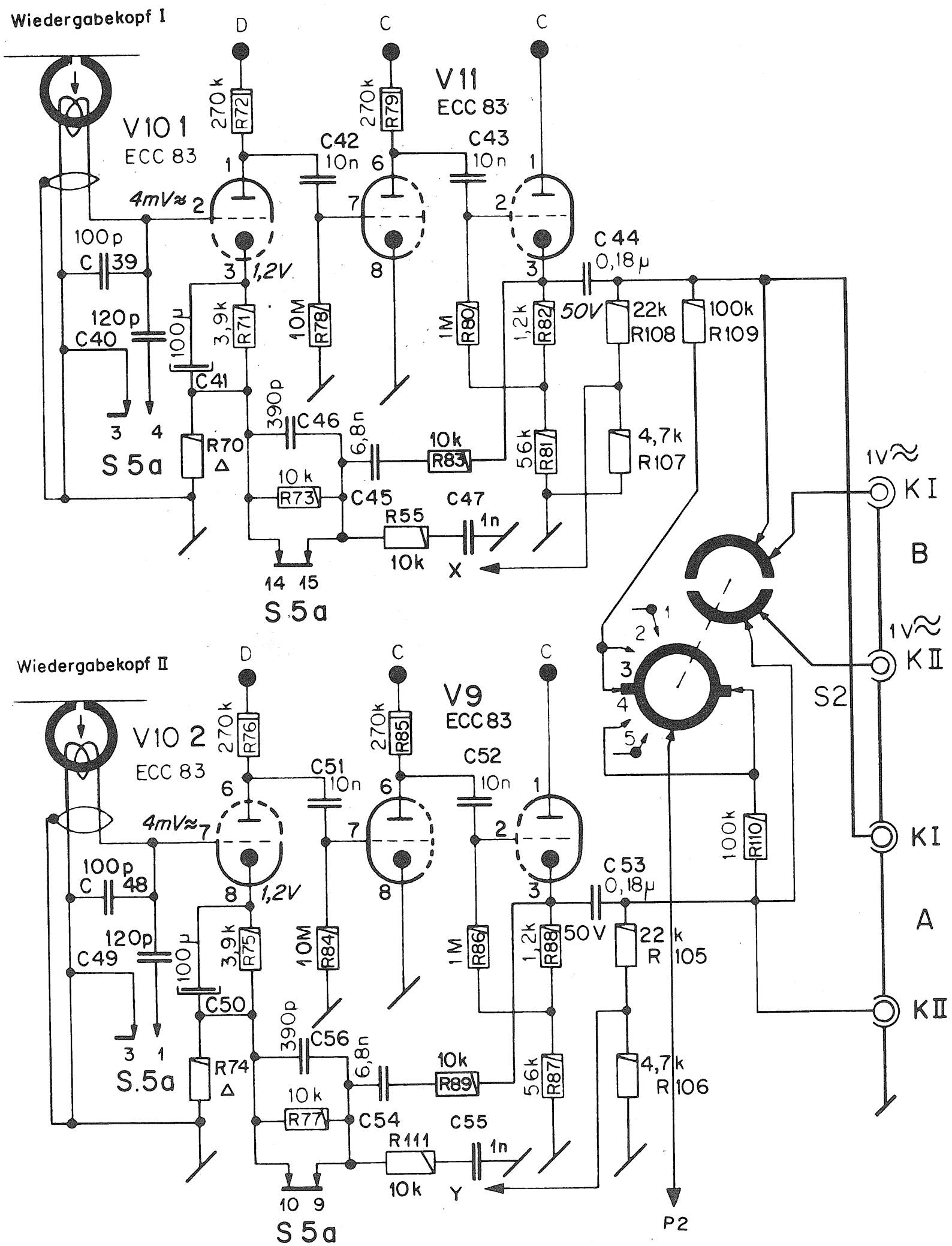
All data are valid for the 2-track as well as for the 4-track recorder unless specified otherwise.



Circuit Diagram A
 REVOX G 36 no 35 001 - 36 500
 Motor- and controlcircuit with power supply



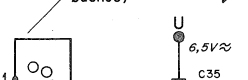
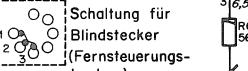
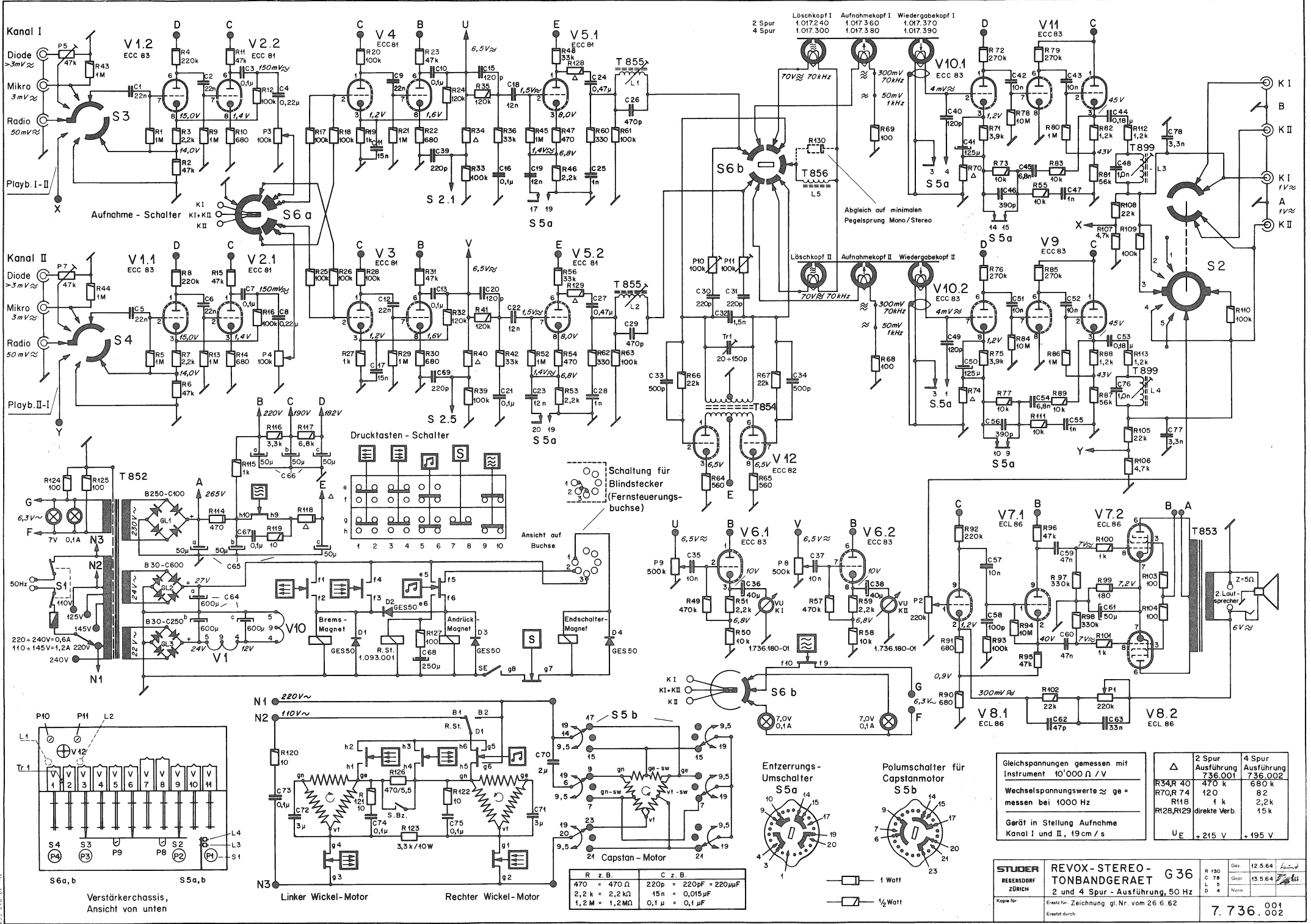
Circuit Diagram B
 REVOX G 36 no 36 501 - 37 400
 Motor- and controlcircuit with power supply



Circuit Diagram C

REVOX G 36 no 35 001 - 37 000

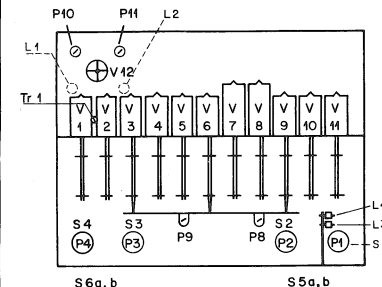
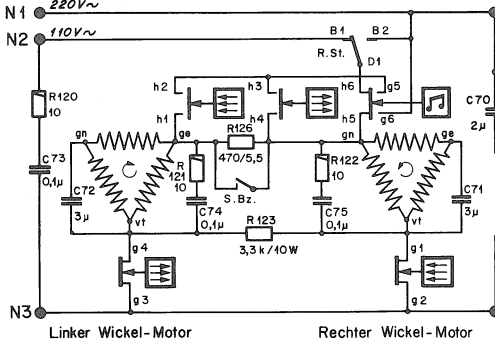
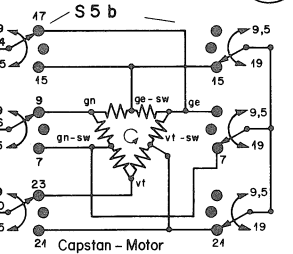
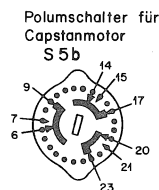
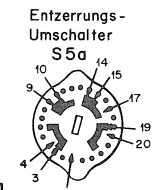
Circuit of the playback amplifiers, cathode-follower outputs without bias traps.



R	Z	B	C	Z	B
470	=	470 Ω	220p	=	220pF = 220μμF
2,2k	=	2,2kΩ	15n	=	0,015μF
1,2M	=	1,2MΩ	0,1μ	=	0,1μF

Gleichspannungen gemessen mit Instrument 10'000 Ω / V	Wechselspannungswerte ≈ ge = messen bei 1000 Hz	Gerät in Stellung Aufnahme Kanal I und II, 19 cm / s	Δ	2 Spur Ausführung 736.001	4 Spur Ausführung 736.002
			R34,R 40	470 k	680 k
			R70,R 74	120	82
			R118, R128,R129	4 k	2,2k
			direkte Verb.	15 k	
U _E			+215 V	+195 V	

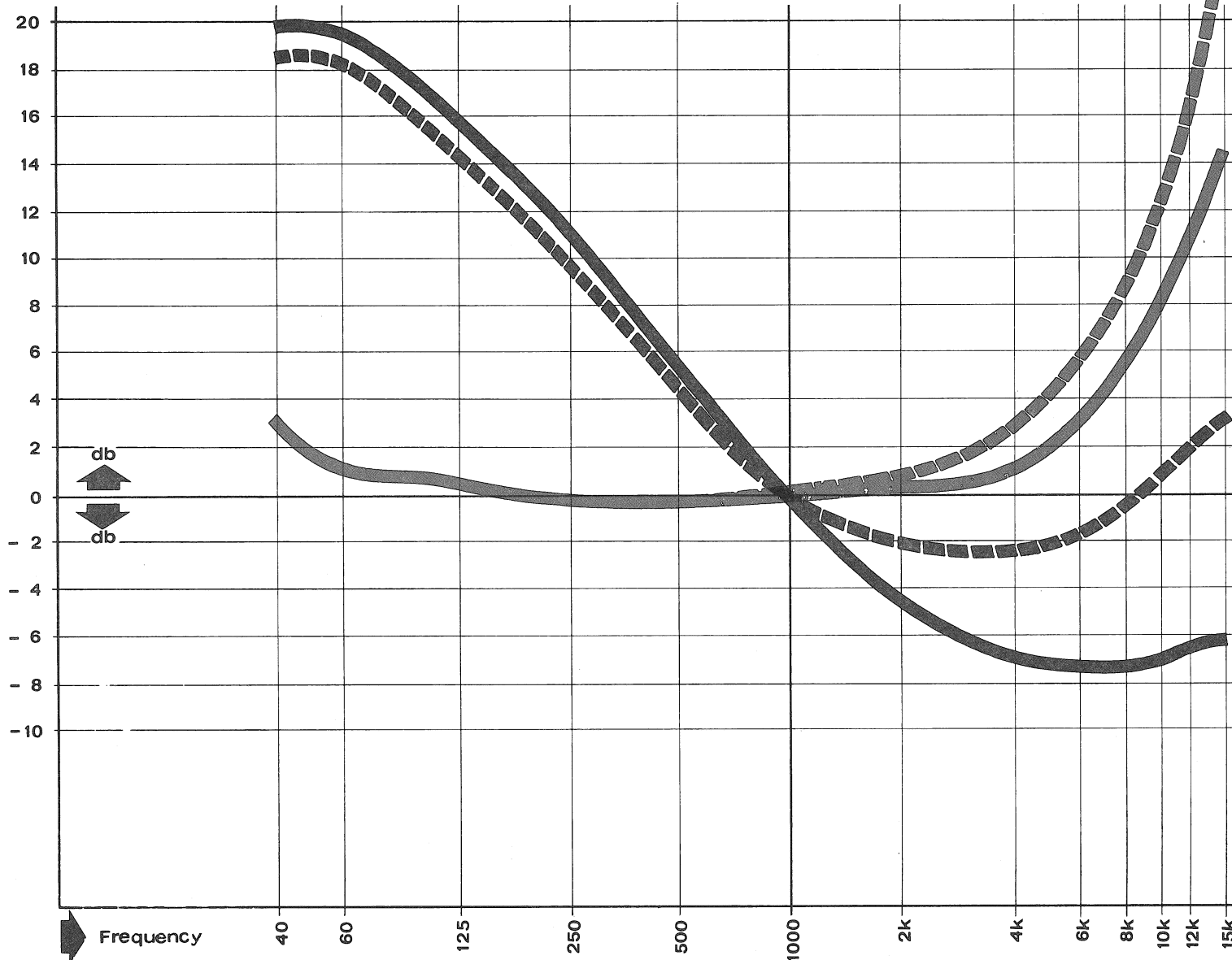
STUDER REGENSDORF ZÜRICH	REVOX-STEREO- TONBANDGERÄT G36 2 und 4 Spur - Ausführung, 50 Hz	R 130	Gez	12.5.64	
		C 78	Gepr	13.5.64	
		L 9	Norm		
		D 4	Norm		
Kopie für:		Erstellt für: Zeichnung gl.Nr. vom 26.6.62		Erstellt durch:	
				7.736.002	



Verstärkerchassis, Ansicht von unten

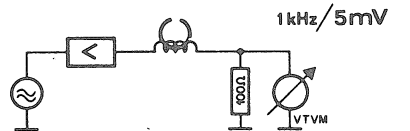
Frequenzgang Wiedergabeverstärker
 Courbe de réponse Amplificateur de lecture
 Playback Equalization

Frequenzgang Aufnahmeverstärker
 Courbe de réponse Amplificateur d'enregistrement
 Recording Pre-emphasis



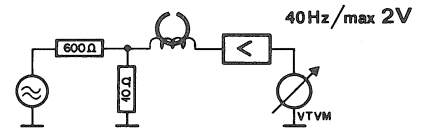
▷ 9.5 cm/s IEC

▷ 19 cm/s IEC



▷ 9.5 cm/s IEC

▷ 19 cm/s IEC



Modifications effective from serial number 48401 (Motor-control circuit) onwards
48701 (Transmission response of
record amplifier)

Motor - control circuit

Changes in the circuit of the spooling motors were effected in order to improve the performance during the start-mode under extreme ratios of the supply and feed loads.

The relay R.St. mentioned on page 3 which operates with a delayed release time, now supplies the higher voltage during the start-mode to the right hand spooling motor only. Perfect starts are thus assured even with small tape roll diameters on both sides. In situations where the recorder has to be started with large tape roll diameters on the right hand side, performance is improved by the fact that the tension remains constant on the left hand motor during the operating time of the R.St. relay.

The relay R.St. is being actuated by a current pulse. It remains de-energised during all other stages of operation. The condenser C68 (250 mF) which receives its charge from the 24 Volt supply, discharges through the R.St. relay when depressing the play-button and the relay gets energised for 0,3 sec. approx., thereby feeding a higher supply voltage to the right hand spooling motor for that period of time.

Transmission response of record amplifier

As can be seen from figure 13, page 14, there is a considerable rise in the high frequency response of the record amplifier. This response characteristic is necessitated by the standardised replay equalisation, as well as by the type of tape emulsion utilised for recording. The frequency response displays a peak around 30kc on machines up to the above mentioned serial number. In conjunction with the extremely wide response characteristic of the record and replay amplifiers, this could cause interferences due to overmodulation when recording programs derived from carrier distribution systems with too high a residual RF component after de-modulation. Furthermore, it was difficult to obtain precise readings with wow and flutter meters employing square wave test signals.

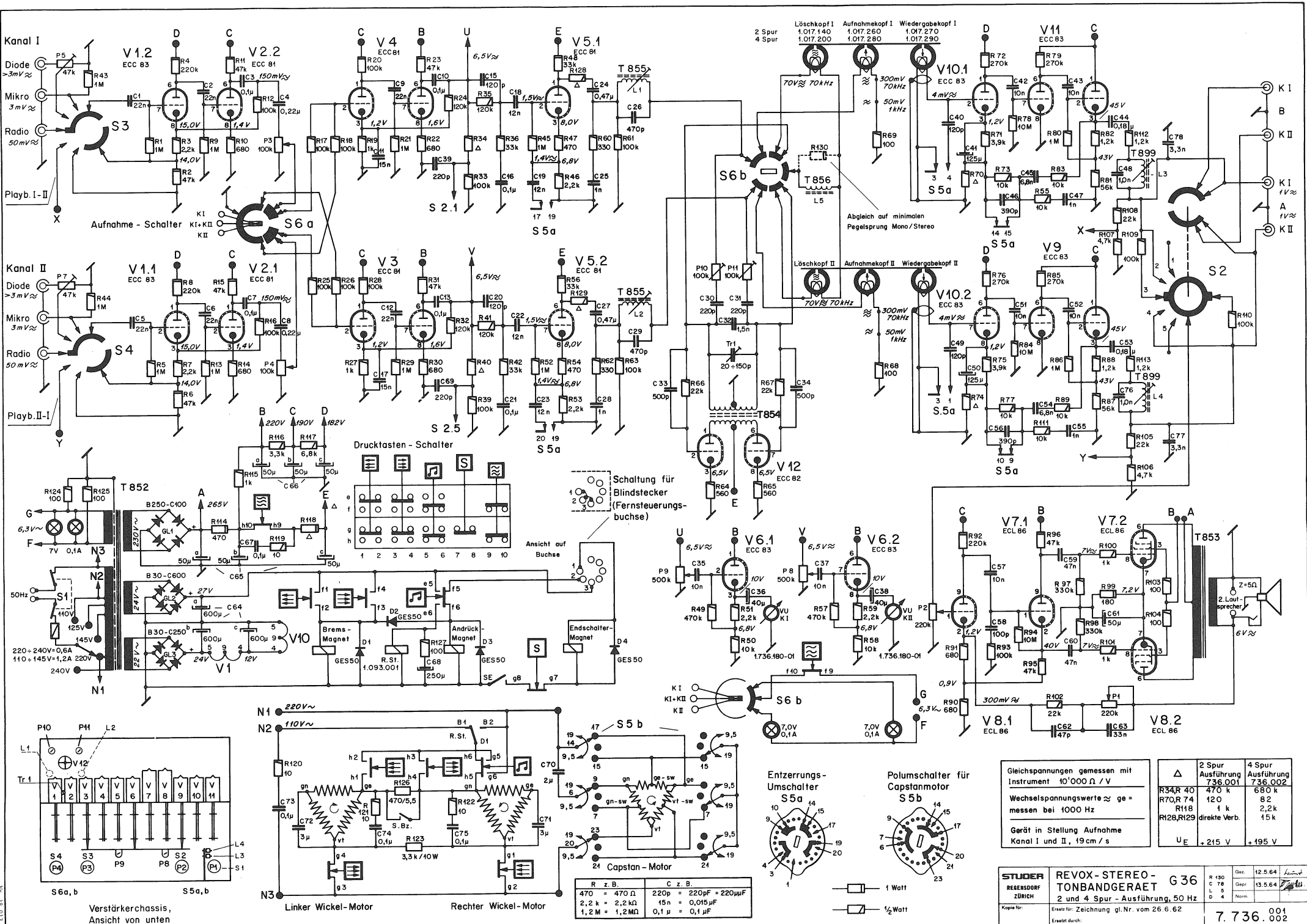
With the insertion of an inverse feedback loop (V3 - C80, V4 - C79, respectively 10mmf each) plus a reduction in value of the cathode by-pass capacitor (V3 - C17, V4 - C11 respectively, reduced from 0,015 to 0,012 mf) The response peak could now be lowered to 23kc approx. The frequency response curve remains unaltered in the portion of the audio band which is required for sound recording.

The following values of attenuation are thus obtained:

	7 1/2 ips	3 3/4 ips
30 kc	- 8 db	- 11 db
38 kc	-12 db	- 13 db

which greatly eliminates the possibility of generating beat signals from ultrasonic frequencies. Where stereo broadcasts are to be recorded, use of the REVOX-multiplex filter will be essential, particularly when operating at the tape speed of 3 3/4 ips.

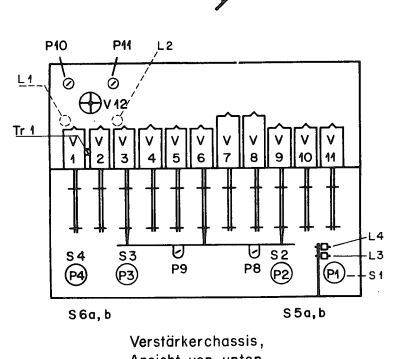
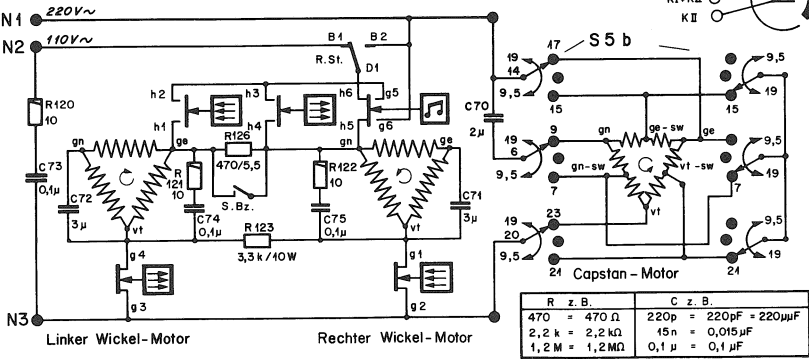
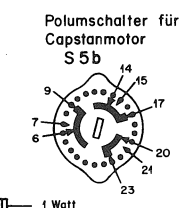
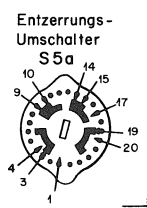
REVOX G36 recorders not containing these modifications can easily be adapted to the new response characteristic by replacing and/or adding the above mentioned components.



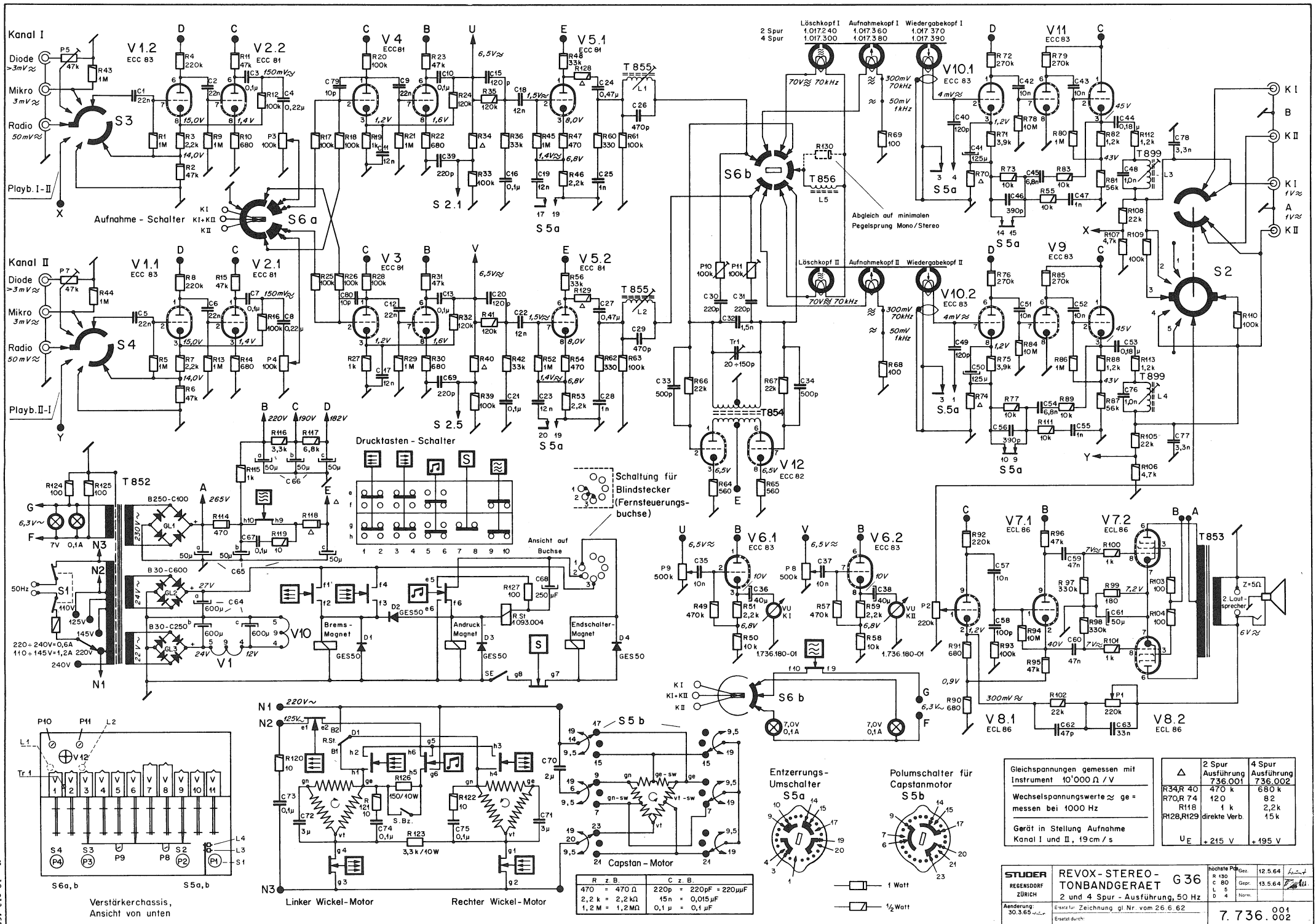
Gleichspannungen gemessen mit Instrument 10'000 Ω / V	Δ	2 Spur Ausführung 736.001	4 Spur Ausführung 736.002
		R34, R 40 R70, R 74 R116 R128, R129 direkte Verb.	470 k 120 Ω 1 k 82 k 15 k
		U _E	+ 215 V + 195 V

STUDER REGENSDORF ZÜRICH	REVOX-STEREO-TONBANDGERÄT G36		C 130 C 78 L 5 D 4	Gez. 12.5.64 Gepr. 13.5.64 Norm.
	2 und 4 Spur - Ausführung, 50 Hz			

R z. B.	C z. B.
470 = 470 Ω	220p = 220pF = 220µµF
2,2 k = 2,2 kΩ	15n = 0,015µF
1,2 M = 1,2 MΩ	0,1 µ = 0,1 µF

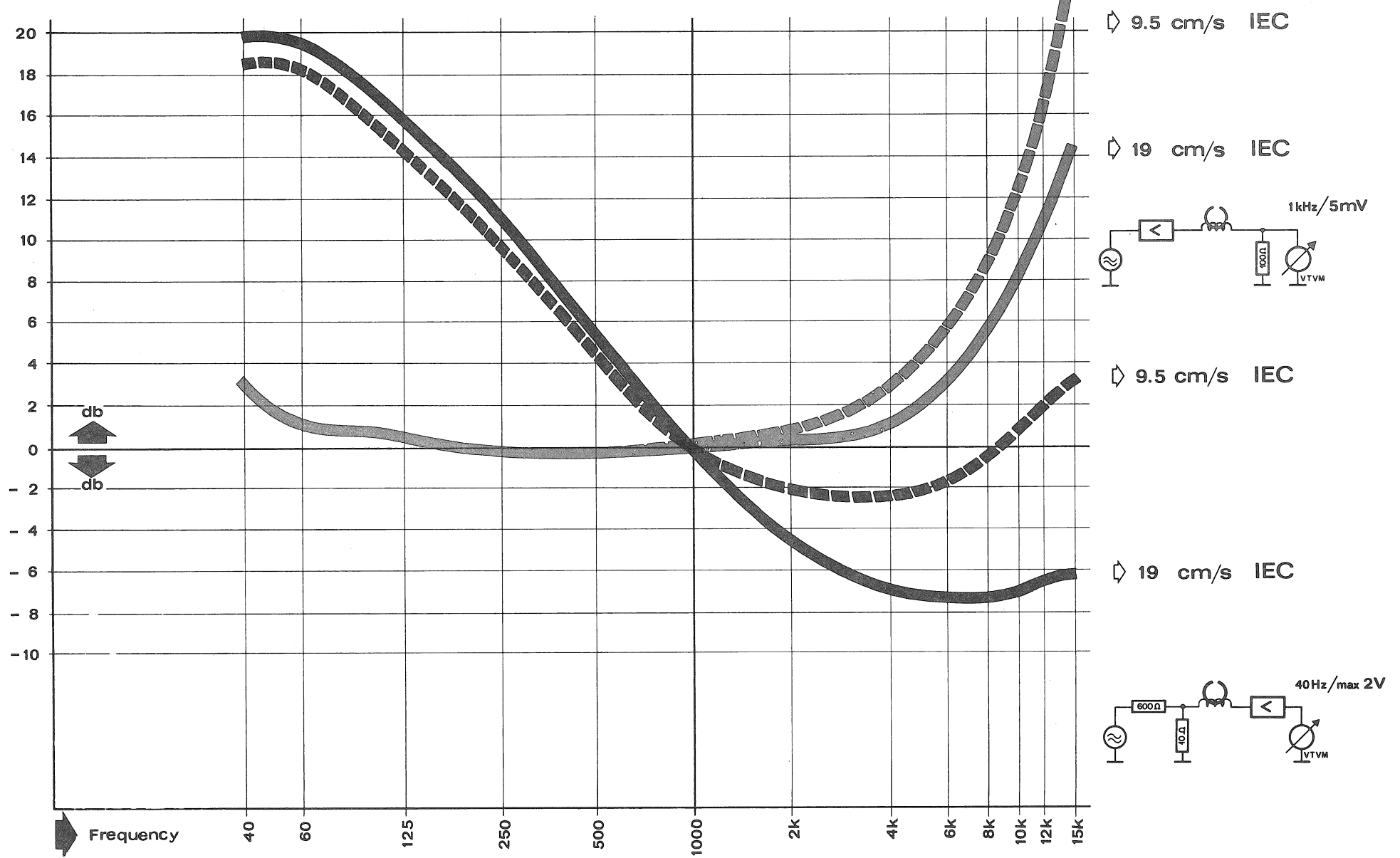


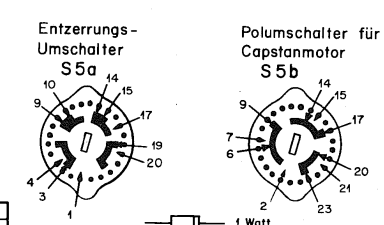
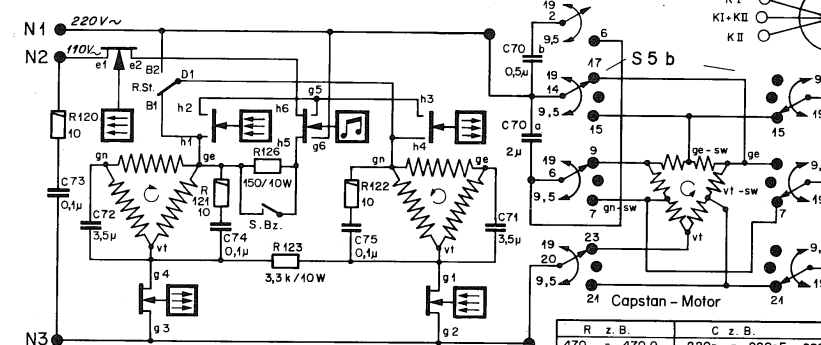
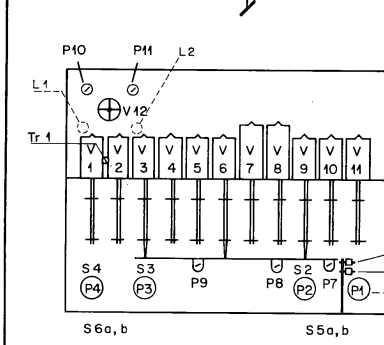
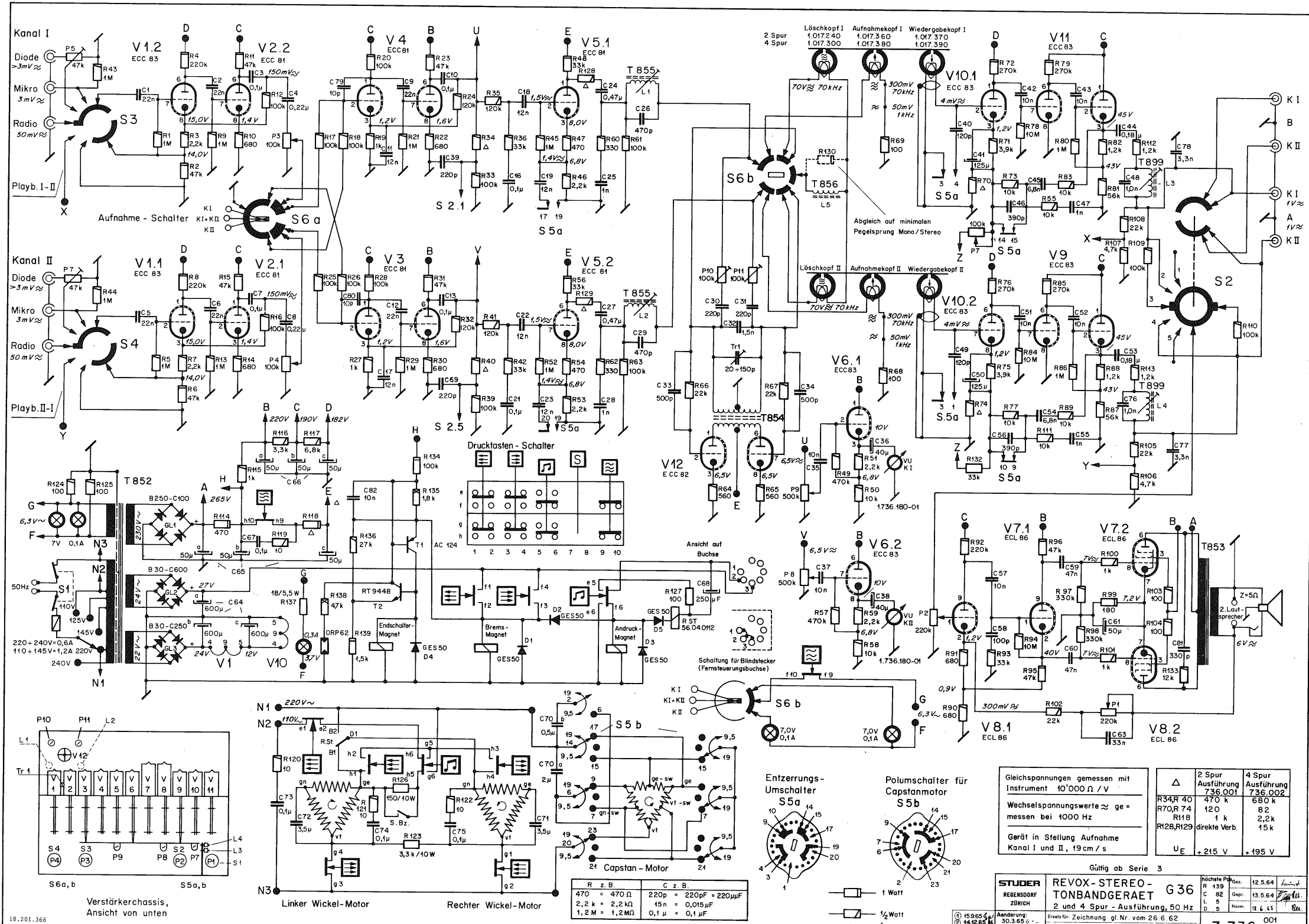
No. 38-013-564



Frequenzgang Wiedergabeverstärker
Courbe de réponse Amplificateur de lecture
Playback Equalization

Frequenzgang Aufnahmeverstärker
Courbe de réponse Amplificateur d'enregistrement
Recording Pre-emphasis





Gleichspannungen gemessen mit Instrument 10'000 Ω / V

Wechselspannungswerte \approx ge = messen bei 1000 Hz

Gerät in Stellung Aufnahme Kanal I und II, 19 cm / s

	2 Spur Ausführung 736.001	4 Spur Ausführung 736.002
Δ	R34, R40	470 k
	R70, R74	120 k
	R18	1 k
	R128, R129	2,2 k
		15 k
	direkte Verb.	
U _E	+215 V	+195 V

Gültig ab Serie 3

STUDER	REVOX - STEREO - TONBANDGERÄT G36	Rechte P4	12.5.64
REGENSDORF ZÜRICH	2 und 4 Spur - Ausführung, 50 Hz	R 139	12.5.64
		C 82	13.5.64
		L 5	16.6.64
		D 5	18.6.64

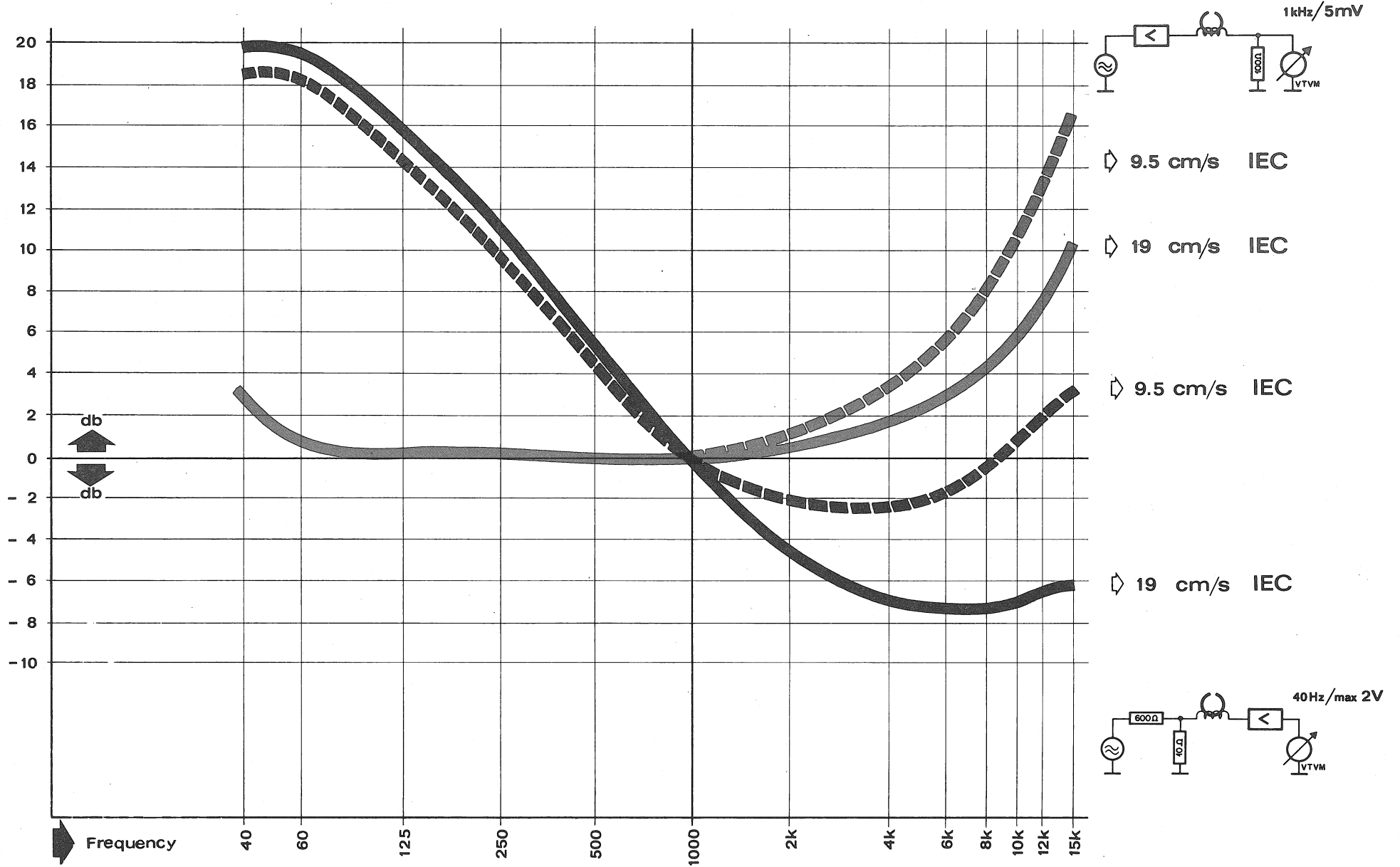
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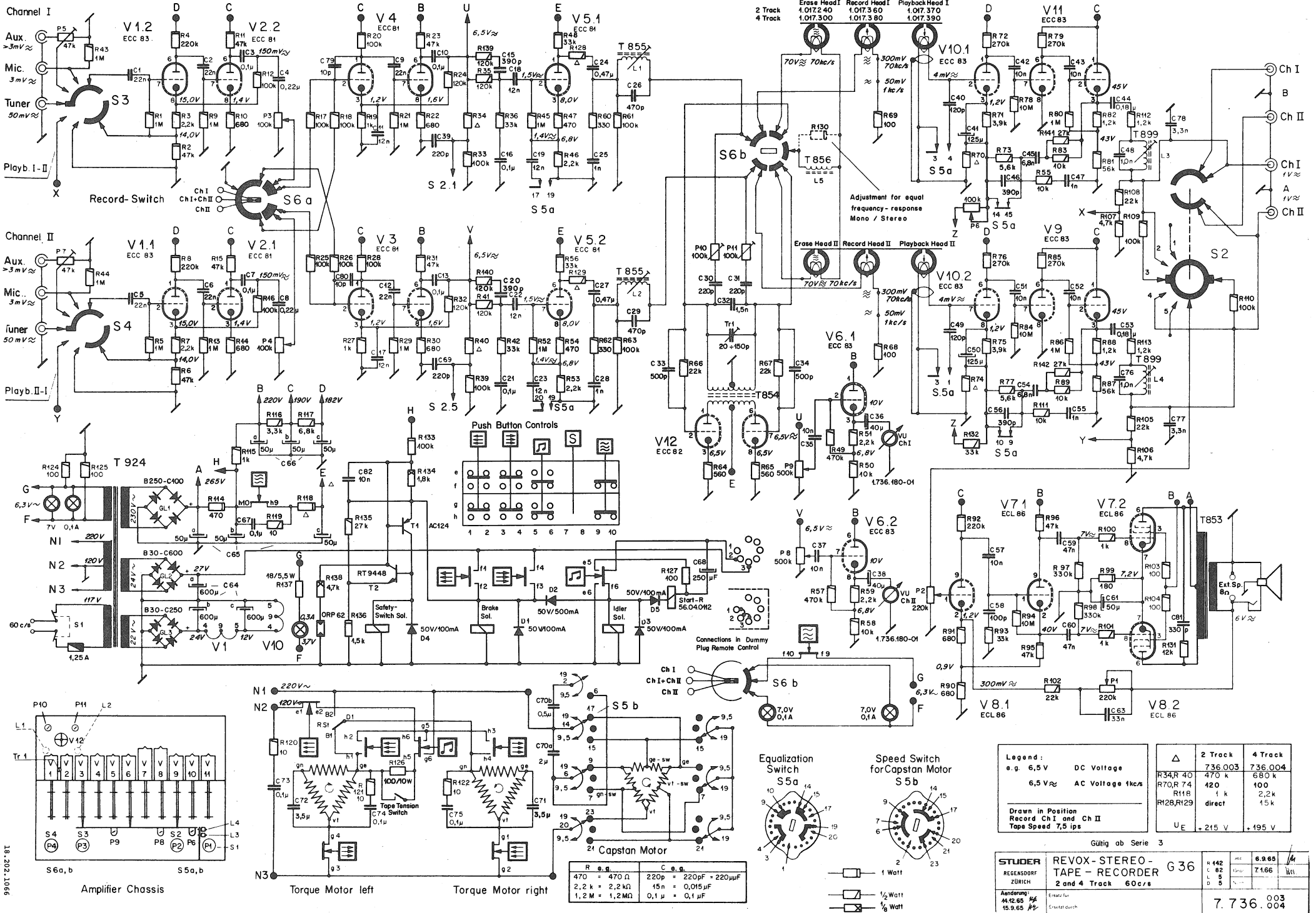
Einzel-Nr.: 30.3.65/64, 18.6.65/64

Einzel-Nr.: 7.736.001, 7.736.002

Frequenzgang Wiedergabeverstärker
 Courbe de réponse Amplificateur de lecture
 Playback Equalization

Frequenzgang Aufnahmeverstärker
 Courbe de réponse Amplificateur d'enregistrement
 Recording Pre-emphasis



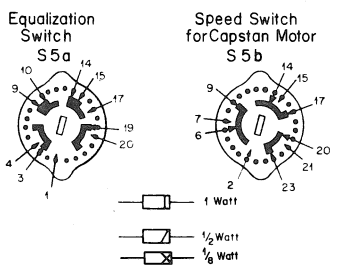


18-202-1066

Legend: e.g. 6,5V DC Voltage 6,5V~ AC Voltage 1k/c/s Drawn in Position Record Ch I and Ch II Tape Speed 7,5 ips	2 Track 736.003	4 Track 736.004
	R34,R 40 470 k	680 k
	R70,R 74 420	100
	R118 1 k	2,2 k
R128,R129 direct	15 k	
U E +215 V		+195 V

STUDER REGENSDORF ZÜRICH	REVOX - STEREO - TAPE - RECORDER 2 and 4 Track 60c/s	G 36
Änderung: 44.85 15.9.65	442 82 4 5	6.965 7.166 11
7.736.004		003

R	e.g.	470 Ω	220p = 220pF = 220µµF
		2,2 k = 2,2kΩ	15n = 0,015µF
		1,2 M = 1,2MΩ	0,1µ = 0,1µF



Amplifier Chassis
Torque Motor left
Torque Motor right

Amplifier Chassis

S6a, b

S5a, b

Torque Motor left

Torque Motor right

Capstan Motor

Speed Switch for Capstan Motor

Equalization Switch

Legend:

2 Track 4 Track

Drawn in Position

Record Ch I and Ch II

Tape Speed 7,5 ips

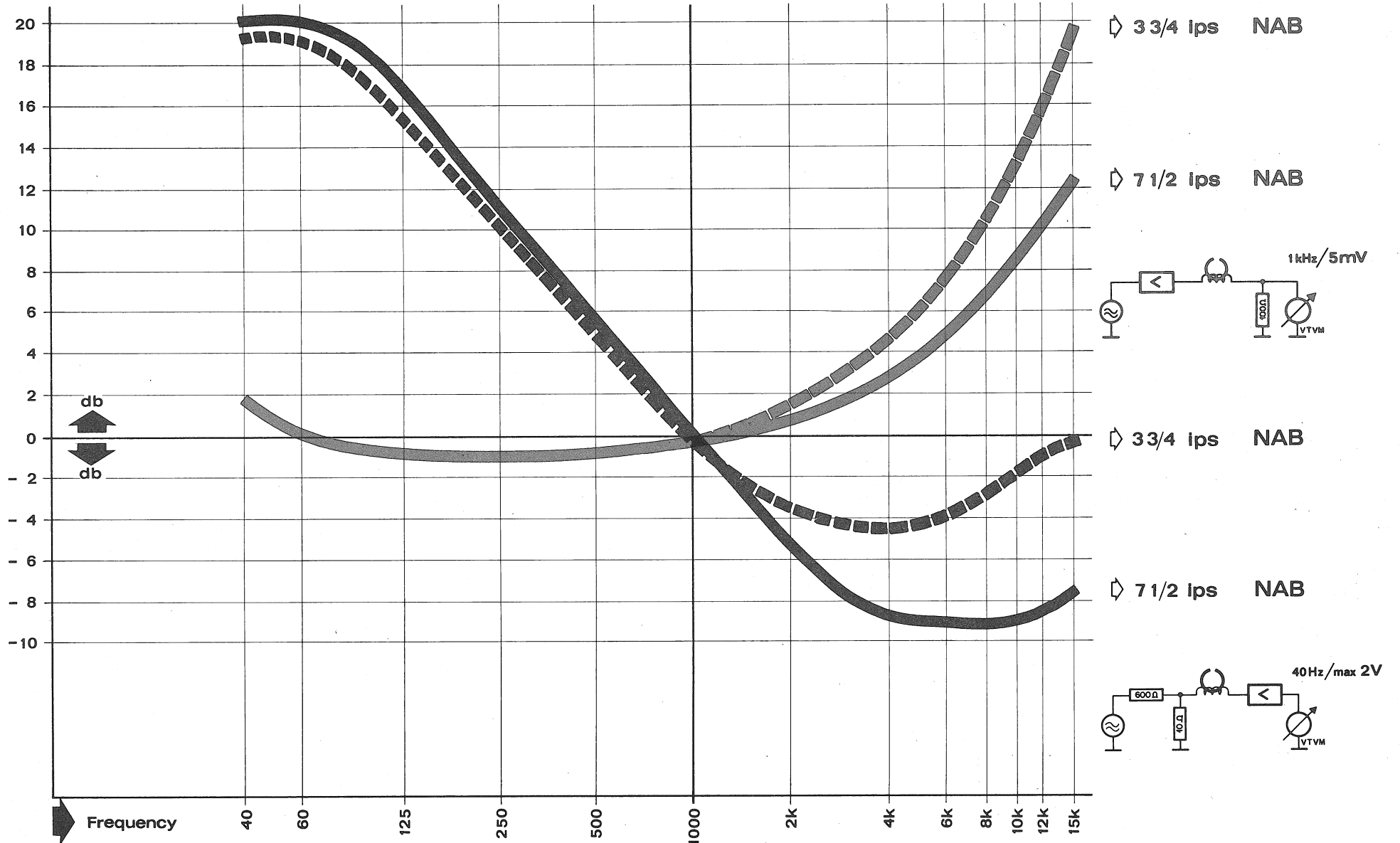
U E +215 V +195 V

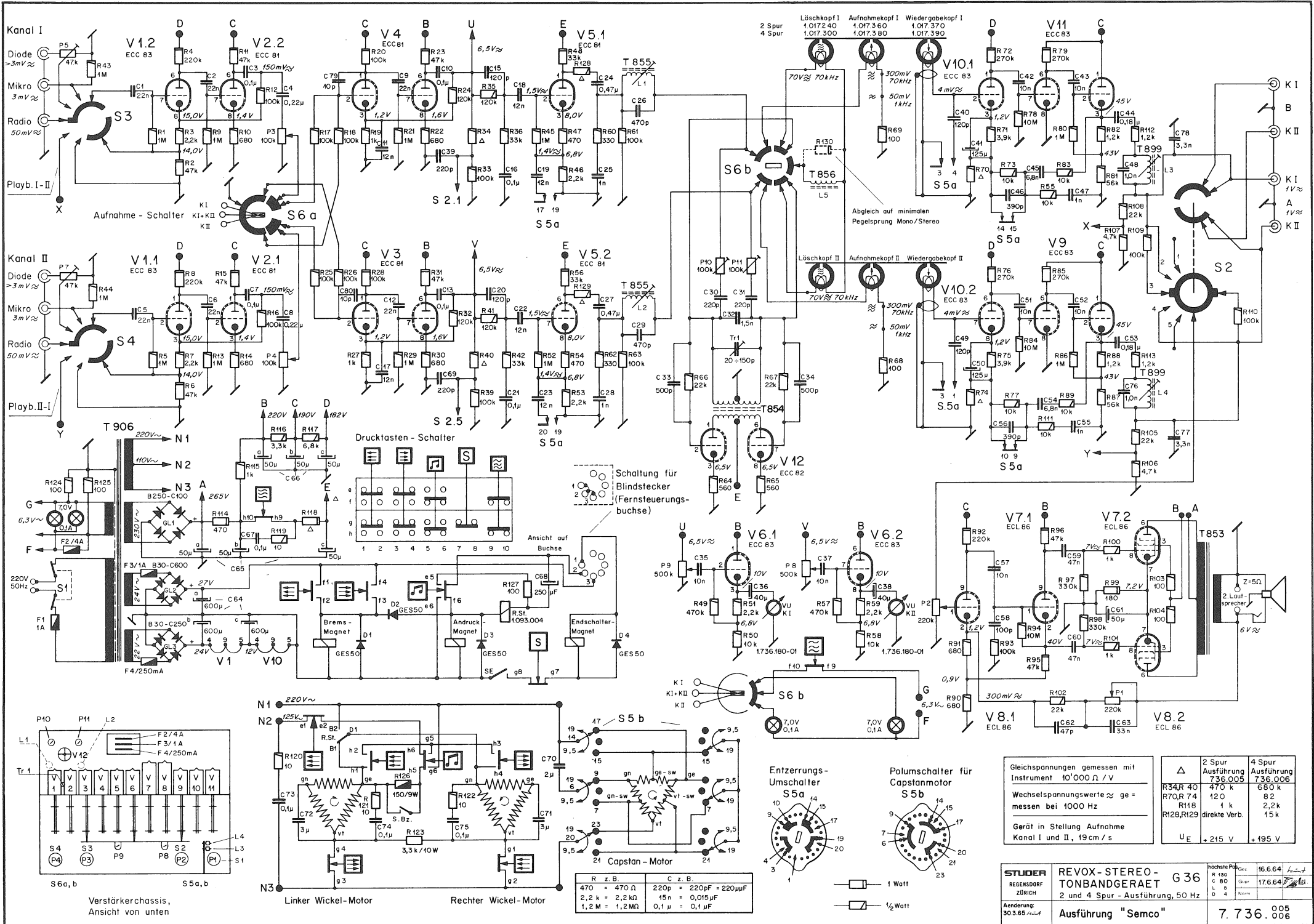
Gültig ab Serie 3

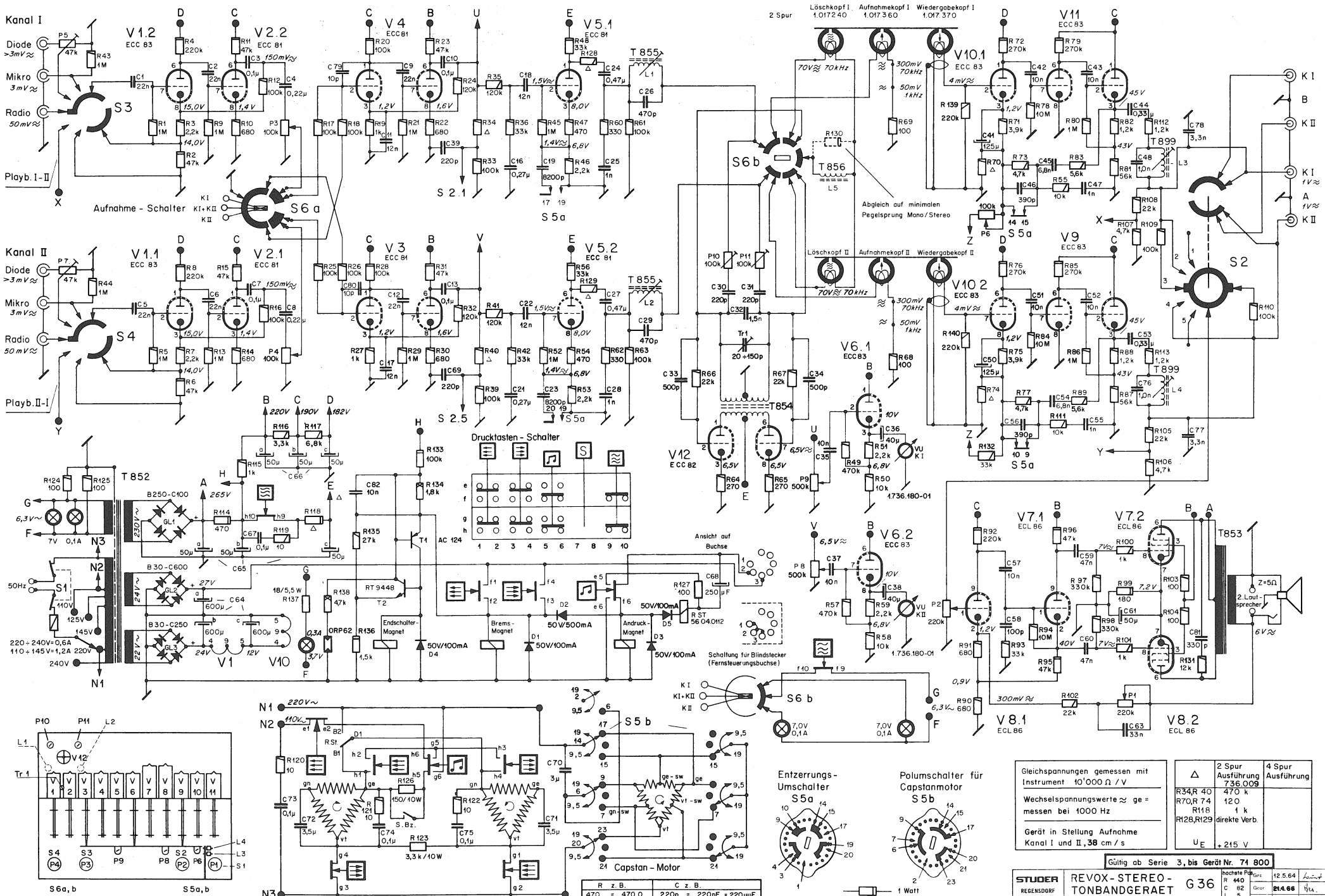
STUDER REGENSDORF ZÜRICH	REVOX - STEREO - TAPE - RECORDER 2 and 4 Track 60c/s	G 36
Änderung: 44.85 15.9.65	442 82 4 5	6.965 7.166 11
7.736.004		003

Frequenzgang Wiedergabeverstärker
 Courbe de réponse Amplificateur de lecture
 Playback Equalization

Frequenzgang Aufnahmeverstärker
 Courbe de réponse Amplificateur d'enregistrement
 Recording Pre-emphasis



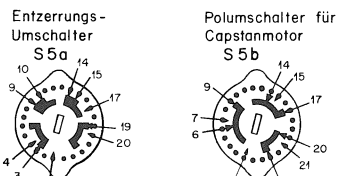




18.204.1066 Verstärkerchassis, Ansicht von unten

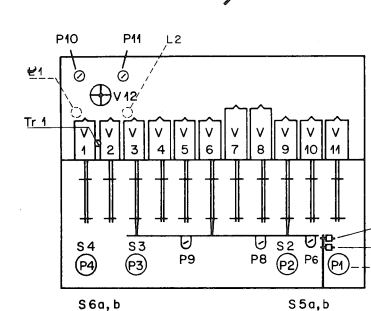
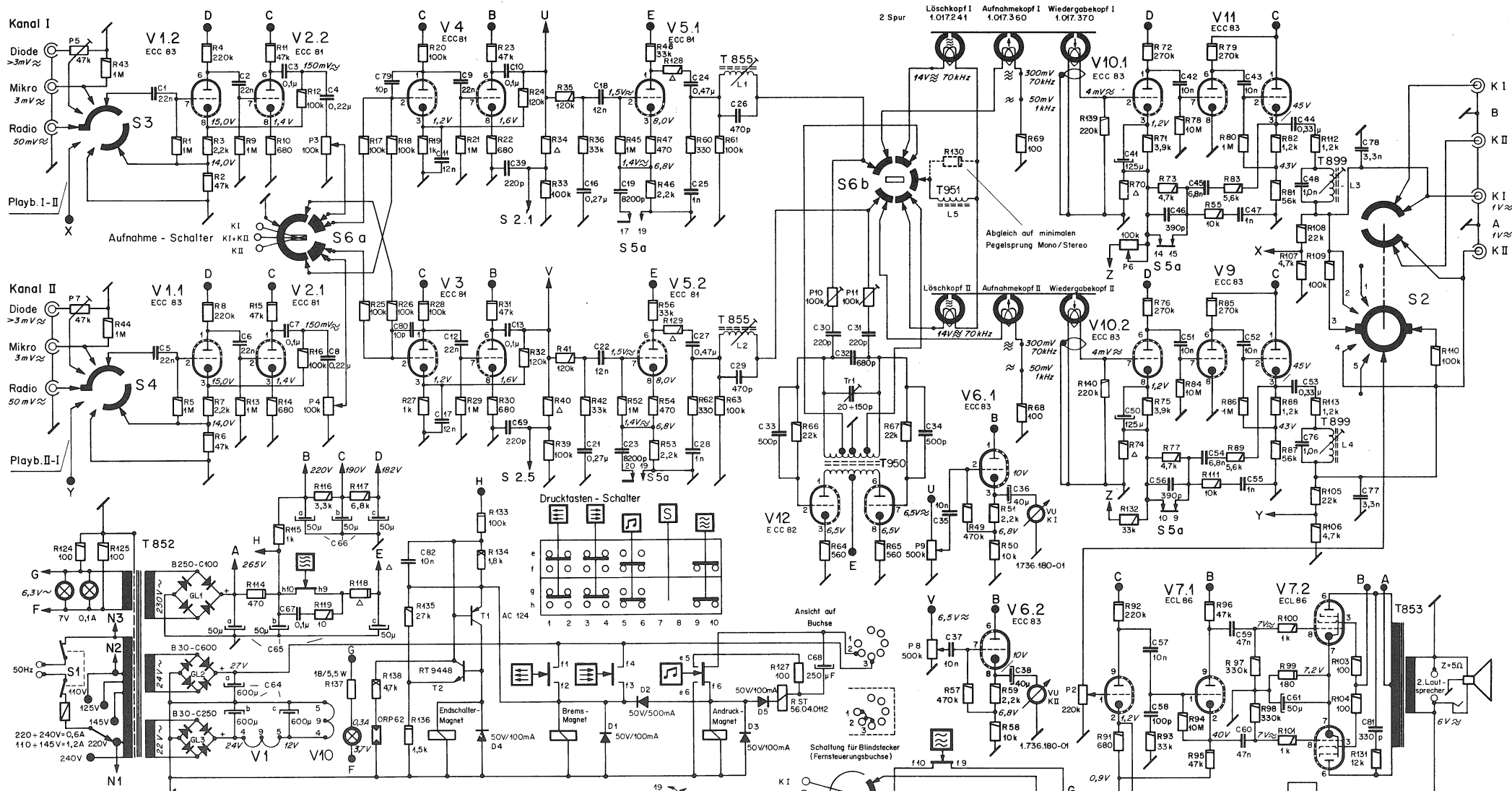
Linker Wickel-Motor Rechter Wickel-Motor

R	Z	B	C	Z	B
470	=	470 Ω	220p	=	220pF = 220µµF
2,2 k	=	2,2 kΩ	15 n	=	0,015µF
1,2 M	=	1,2 MΩ	0,1 µ	=	0,1µF

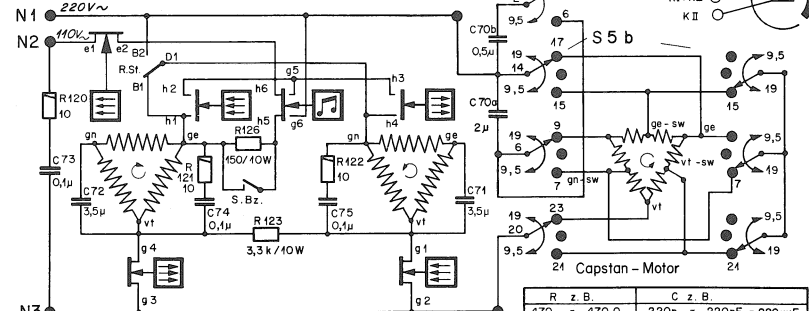


Gleichspannungen gemessen mit Instrument 10'000 Ω / V	2 Spur Ausführung 736.009	4 Spur Ausführung
Wechselspannungswerte \geq u_e = messen bei 1000 Hz	R34,R 40 470 k	R70,R 74 120
Gerät in Stellung Aufnahme Kanal I und II, 38 cm / s	R118 1 k	R126,R129 direkte Verb.
	u_e = 215 V	

Gültig ab Serie 3, bis Gerät Nr. 74 800		
STUDER REGENSDORF ZÜRICH	REVOX - STEREO - TONBANDGERÄT G36 2Spur 50Hz 49/38 cm/s Mot 4/8pol.	höchste Preis 12.564
Aenderung:	Ersetzt durch	214.66
		7.736.009

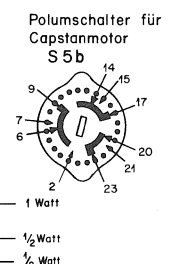
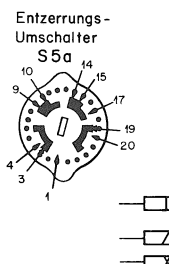


Verstärkerchassis, Ansicht von unten



Linker Wickel-Motor Rechter Wickel-Motor

R z B	C z B
470 = 470 Ω	220p = 220pF = 220µF
2,2 k = 2,2 kΩ	15n = 0,015µF
1,2 M = 1,2 MΩ	0,1µ = 0,1µF



Gleichspannungen gemessen mit Instrument 10'000 Ω / V	Δ	2 Spur Ausführung	4 Spur Ausführung
	R34,R 40	736 010	
Wechselspannungswerte ≈ ge = messen bei 1000 Hz	R70,R 74	120	
	R118	1 k	
Gerät in Stellung Aufnahme Kanal I und II, 38 cm / s	R128,R129	direkte Verb.	
	U _E	+215 V	

Gültig ab Serie 3, ab Gerät Nr. 71801			
STUDEF	REVOX-STEREO-TONBANDGERÄT G36	Nächste Fol.	
REGENSDORF	ZÜRICH	R 440	12.5.64
		C 82	470 k
		L 5	22.11.66
		D 5	Norm.
Aenderung:	Erstellt von:	Erstellt durch:	
			7. 736. 010

Ersatzteilliste
SPARE PARTS LIST
Liste des pièces détachées
Listino dei pezzi di ricambio

Ausgabe IV
ISSUE IV
Edition IV
Edizione IV

Die vorliegende Ersatzteilliste ist wesentlich erweitert und für die komplizierten Baugruppen mit Explosions - Zeichnungen versehen. Die Tabelle ist in folgende Kolonnen eingeteilt.

INDEX	Die Indexnummer entspricht der Suchnummer in den Zeichnungen und Bildern.
BESTELLNUMMER	Bestellungen sind nur nach dieser Nummer aufzugeben.
BESCHREIBUNG	Bei der Kurzbeschreibung der einzelnen Positionen ist die deutsche Bezeichnung verbindlich. Bei einigen Kunststoffteilen mit gleicher Bestellnummer bitte auch die entsprechende Farbnummer angeben.
SERIE	Die drei Kolonnen geben an, in welcher Serie die entsprechenden Positionen Verwendung finden. Teile die in gewissen Serien nicht direkt ausgetauscht werden können sind mit eingeklammerten (x) markiert. An ihrer Stelle sind komplette Baugruppen zu bestellen.
ANZAHL	Gibt an, wieviele gleiche Teile in der Baugruppe vorhanden sind.
INDEX III	Gibt zu Vergleichszwecken die Bestellnummer der <u>nicht mehr gültigen Ersatzteilliste Ausgabe III</u> an. <u>Diese Nummer darf nicht mehr für Bestellungen verwendet werden.</u>

BEI BESTELLUNGEN IMMER DIE BESTELLNUMMER UND DIE KURZBEZEICHNUNG DES TEILES ANGEBEN.

This Issue of the Spare Parts List has been augmented in all sections and exploded views are included for the more complicated sub - assemblies. The tabulations are divided into the following columns:

INDEX	Index numbers are identical with the tracer numbers shown in the drawings and photographs.
ORDER NUMBER	This number must be used when ordering spare parts.
PART DESCRIPTION	In case of inexact part description due to translation errors the german version shall be the determinant. When ordering plastic parts with the same order number, but of slightly differing colour, add colour code number.
SERIES	The three columns indicate in which series a particular part is used. Parts which are not directly interchangeable between Series are marked by the letter (x) in parentheses. They have to be replaced by complete sub - assemblies.
QUANTITY	Indicates the number of identical parts within the assembly.
INDEX III	Cross index with Parts List Issue III which is now <u>cancelled</u> . <u>Index III must not be used any more when ordering parts.</u>

ALL ORDERS SHOULD STATE ORDER NUMBER AND SHORT PART DESCRIPT.

La présente liste de pièces détachées, sensiblement revue et augmentée, a été illustrée de vues éclatées pour les éléments les plus complexes.

La table est composée des colonnes suivantes :

INDEX	Le numéro de l'index correspond aux dessins et photos.
NUMERO DE COMMANDE	Prière de ne passer votre commande que selon ce numéro.
DESCRIPTION	Seule la définition allemande fait foi. Pour les pièces en matière synthétique ayant le même numéro de commande, prière de préciser la couleur.
SERIE	Les trois colonnes précisent dans quelle série les pièces trouvent leur emploi. Les pièces qui ne sont pas directement interchangeables dans certaines séries sont marquées d'un (x) entre parenthèses. En lieu et place, prière de commander l'élément complet.
NOMBRE	Ce nombre indique combien de pièces du même type se trouvent dans une même unité de construction.
INDEX III	Indication du numéro de commande <u>périmé</u> de l'édition III. <u>Ce numéro ne doit plus être utilisé.</u>

POUR VOS COMMANDES, PRECISEZ TOUJOURS LE NUMERO DE COMMANDE ET LA DESCRIPTION DE LA PIECE.

Questo listino è stato maggiormente ampliato e gli elementi più complicati sono stati disegnati in scaglione. Il listino è suddiviso nelle seguenti colonne.

INDICE	I numeri d'indice corrispondono ai numeri nei disegni e figure.
NUMERO D'ORDINAZIONE	L'ordinazione dei pezzi dev'essere fatta solamente con questi numeri.
DESCRIZIONE	Solo la definizione tedesca viene ritenuta come valida. Per i materiali in plastica con lo stesso numero si prega di dare anche il numero del colore.
SERIE	Le tre colonne indicano per quale serie i nominati pezzi vengono usati. I pezzi che non possono essere usati per diverse serie sono contrassegnati con una (x) tra parentesi. In questo caso si deve ordinare l'elemento completo.
NUMERO	Indicate la quantità di pezzi uguali che si trovano nello stesso elemento.
INDICE III	A scopo di paragone sono riportati i numeri dell'edizione III <u>non più valida.</u> <u>Si prega di non usare questo numero per ordinazioni.</u>

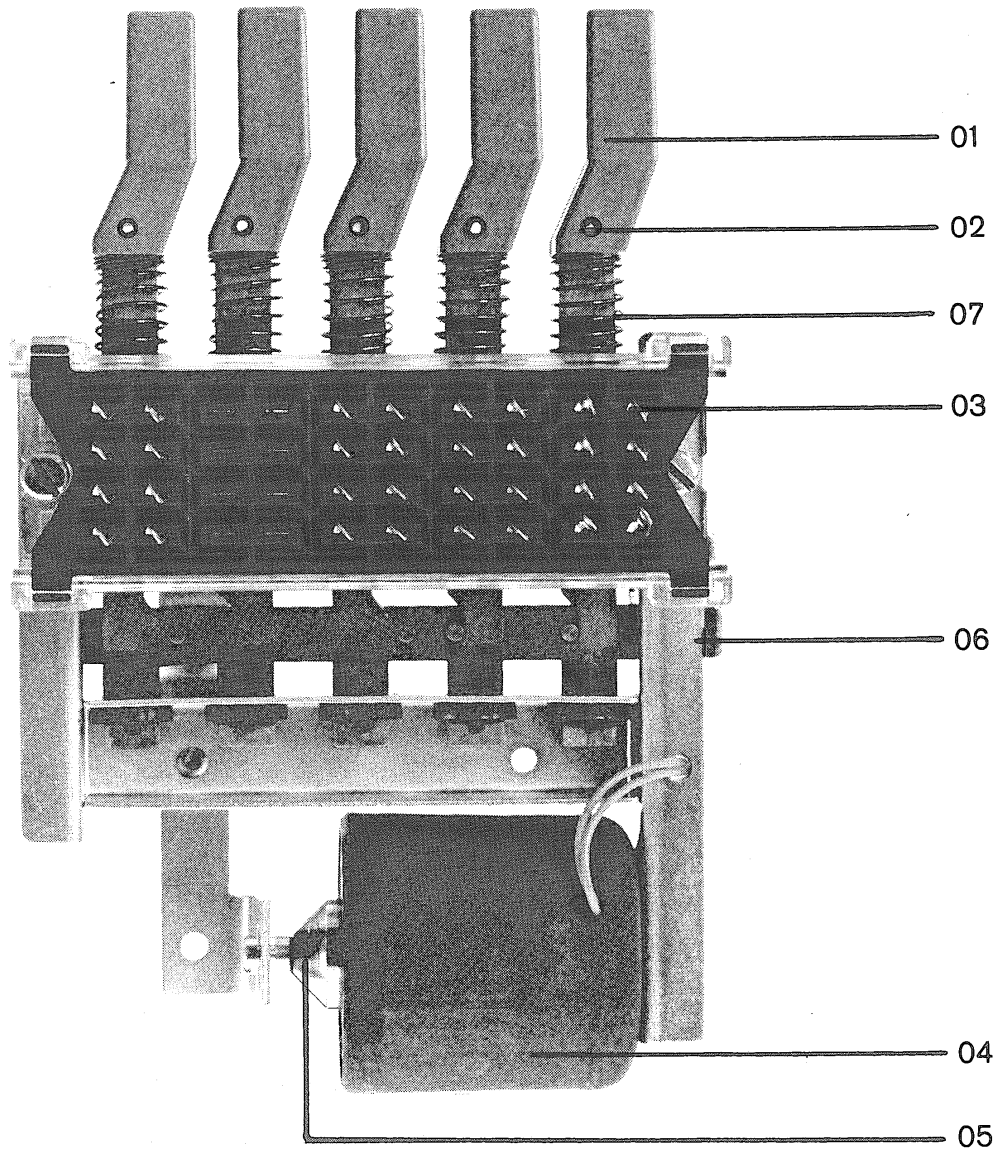
PER OGNI ORDINAZIONE PRECISARE SEMPRE IL NUMERO DELL'ORDINAZIONE E LA DESCRIZIONE DEI PEZZI DESIDERATI.

INDEX	Bestellnummer ORDER NUMBER	Beschreibung / PART DESCRIPTION	SERIE			An Qu	IND. III
			I	II	III		
		Koffer CARRYING CASE Valise					
	1.736. 825	Koffer komplett CASE BOTTOM COMPLETE Valise complète	x	x	x	1	
	1.736. 828-01	Kofferboden CASE BOTTOM Fond amovible de la valise	x	x	x	1	7001
	1.736. 828-03	Gummiring (Bodenbefestigung) RUBBER WASHER (CASE BOTTOM MOUNT) Rondelle de caoutchouc (fixation du fond)	x	x	x	4	7008
	21. 01.0458	Z - Schraube (Bodenbefestigung) MACHINE SCREW (CASE BOTTOM MOUNT) Vis M 4 (fixation du fond)	x	x	x	4	7009
	23. 01.1043	Unterlagscheibe für Befestigungsschraube WASHER FOR CASE BOTTOM MOUNT Rondelle pour dito	x	x	x	4	7010
	1.736. 830	Kofferdeckel kompl. CASE TOP CPLT. Couvercle de valise complet	x	x	x	1	7002
	1.736. 850-02	Verschlussaken für Kofferdeckel LATCH CASE TOP Pêne de verrouillage du couvercle	x	x	x	2	7003
	1.736. 832	Koffermittelteil kompl. CASE MIDDLE SECTION CPLT. Corps de valise complet	x	x	x	1	7004
	1.736. 836	Rückwanddeckel, steckbar REAR PANEL COVER, SNAP FIT Cache amovible de la plaque de connexions	x			1	7005
	1.736. 837	Rückwanddeckel inkl. Rahmen, klappbar REAR PANEL COVER, HINGED, INCL. FRAME Idem (avec charnières et cadre)		x	x	1	7006
	1.736. 832-05	Bodennagel CASE FEET Rivet de la valise	x	x	x	4	7007
	1.736. 834	Stützwand (Chassis träger) CHASSIS MOUNTING BRACKET Paroi de support et de protection du chassis	x	x	x	2	7011
	20. 22.7306	Z - Blechschraube (Stützwandbefestigung) MOUNTING BRACKET SCREW Vis Parker pour dito	x	x	x	16	7012
	1.736. 832-04	Lautsprechergrill LOUDSPEAKER LATTICE Grille de haut - parleur	x			1	7013
	1.736. 832-08	Lautsprechergrill LOUDSPEAKER LATTICE Grille de haut - parleur		x	x	1	7014

INDEX	Bestellnummer ORDER NUMBER	Beschreibung / PART DESCRIPTION	SERIE			An Qu	IND. III
			I	II	III		
	33. 03.0101	Griffbeschlag CARRYING HANDLE MOUNTING BRACKET Socle de poignée	x	x	x	1	7015
	28. 99.0106	Rohrniete RIVET, TUBULAR Rivet	x	x	x	2	7016
	1.736. 501-04	Unterlagscheibe WASHER Rondelle d'appui pour dito	x	x	x	2	7017
	33. 03.0102	Traggriff CARRYING HANDLE Poignée	x	x	x	1	7018
	21. 01.0455	Z - Schraube für Chassisbefestigung M 4x8 MACHINE SCREW M 4x8 (CHASSIS TO BRACKET) Vis M 4x8 de fixation du chassis	x	x	x	6	7019
		Deckplatte TOP PLATE Platine de recouvrement					
	1.736. 851	Deckplatte kompl. TOP PLATE CPLT. Platine de recouvrement complète		x	x		7021
		Deckplatte Serie I ersetzen durch Deckplatte 1.736.851 und Zählwerk 1.736.502-15 TOP-PLATE OF SERIES I TO BE REPLACED WITH TOP-PLATE 1.736.851 AND COUNTER 1.736.502-15 La platine série I est remplacée par la platine 1.736.851 et le nouveau compteur 1.736.502-15	x				7020
	21. 02.3357	LS - Schraube M 3x12 für Befestigung der Deckplatte MACHINE SCREW M 3x12, OVAL HEAD , FOR MOUNTING OF TOP - PLATE Vis goutte de suif M 3x12 de fixation pour dito	x	x	x	6	7022
	1.736. 853	Abdeckkappe Andruckarm PLASTIC COVER FOR PRESSURE ROLLER Cache du galet presseur	x	x		1	7024
	1.736. 500-15	Abdeckkappe Andruckarm PLASTIC COVER FOR PRESSURE ROLLER Cache du galet presseur			x	1	7025
	1.736. 500-13	Abdeckkappe für Kopfträger (ohne REVOX - Schild) PLASTIC HEAD COVER (WITHOUT NAME PLATE) Cache du bloc de têtes (sans plaquette REVOX)	x	x		1	7026
	21. 02.3356	LS - Schraube M 3x10 MACHINE SCREW M 3x10 , OVAL HEAD Vis goutte de suif M 3x10	x	x		2	7028
	43. 02.0101	REVOX Namensschild REVOX NAME - PLATE REVOX plaquette	x	x	x	2	7029

INDEX	Bestellnummer ORDER NUMBER	Beschreibung / PART DESCRIPTION	SERIE			An Qu	IND. III
			I	II	III		
	1.736. 855	Abdeckkappe für Kopfträger (mit REVOX - Schild) PLASTIC HEAD COVER (WITH NAME PLATE) Cache du bloc de têtes (avec plaquette REVOX)			x	1	7027
	1.736. 500-04	Drehknopf grau (durchsichtig) GREY PLASTIC KNOB (TRANSPARENT) Bouton moleté transparent	x	x	x	4	7030
	1.736. 500-10	Filzscheibe FELT WASHER Rondelle de feutre	x	x	x	4	7031
	1.736. 861	Drehknopf grau GREY PLASTIC KNOB Bouton gris	x	x		4	7032
	1.736. 861	Drehknopf grau GREY PLASTIC KNOB Bouton gris			x	4	7033
	1.736. 791-01	Tastenkopf rot PUSH BUTTON RED Bouton poussoir rouge	x	x	x	2	7034
	1.736. 790-02	Tastenkopf schwarz PUSH BUTTON BLACK Bouton poussoir noir	x	x		2	7035
	1.736. 790-02	Tastenkopf grau PUSH BUTTON GREY Bouton poussoir gris			x	2	7036
	1.736. 851-02	Bedienungsschild ESCUTCHEON PLATE Plaquette d'indications pour potentiomètres	x	x	x	1	7041
	1.736. 851-03	Bedienungsschild Tasten ESCUTCHEON PLATE, PUSH BUTTONS Plaquette d'indications pour clavier	x	x	x	1	7042
	1.736. 180-01	VU - Meter VU - METER VU - mètre	x	x	x	2	7128
	1.736. 181	VU - Meter - Träger kompl. (Kunststoff) VU - METER MOUNTING BOARD (PAXOLIN) Support de VU - mètres complet (plastique)	x	x	x	1	
	1.736. 180-03	Abdeckhaube zu VU - Meter COVER, VU - METER Couvercle plexiglas pour VU - mètre	x	x	x	2	7129
	1.736. 180-02	Distanzrohr TUBULAR SPACER Entretoise	x	x	x	8	7130
	51. 02.0101	Anzeige - Lampe PILOT LAMP Lampe cadran	x	x	x	4	7131
	1.736. 255	Lampenfassung kompl. (ohne Lampe) LAMP SOCKET CPLT. (WITHOUT LAMP) Douille complète pour dito (sans lampe)	x	x	x	2	7132

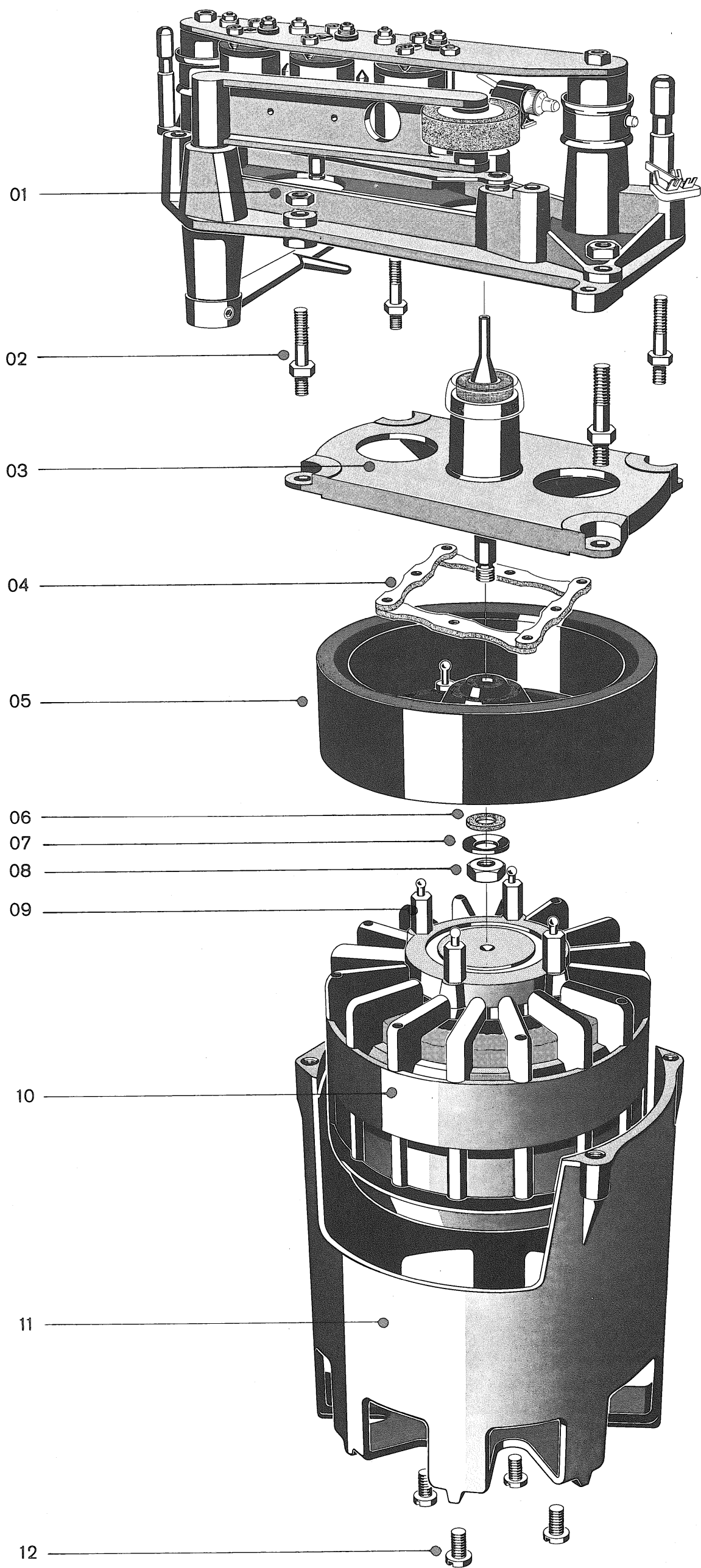
A



INDEX	Bestellnummer ORDER NUMBER	Beschreibung / PART DESCRIPTION	SERIE			An Qu	IND. III	
			I	II	III			
A		Drucktastensatz PUSH BUTTON ASSEMBLY Bloc de touches						
		1.736. 550	Drucktastensatz kompl. PUSH BUTTON ASSY CPLT. Bloc de touches complet	Farb. No. 1035 COLOR 1035 couleur No. 1035	x	x	1	7140
		1.736. 550	Drucktastensatz kompl. PUSH BUTTON ASSY CPLT. Bloc de touches complet	Farb. No. 6760 COLOR 6760 couleur No. 6760			x	1 7141
		20. 21.7203	Z - Blechschraube (Drucktastensatz - Befestigung) SELF TAPPING SCREW (PUSH BUTTON MOUNTING) Vis Parker (fixation du bloc de touches)		x	x	x	4 7142
	01	1.736. 578-02	Drucktaste grau PUSH BUTTON GREY Touche grise	Farb. No. 1035 COLOR 1035 couleur No. 1035	x	x		5 7143
	01	1.736. 578-02	Drucktaste grau PUSH BUTTON GREY Touche grise	Farb. No. 6760 COLOR 6760 couleur No. 6760			x	5 7144
	02	25. 16.1211	Spiralstift (Drucktastenbefestigung) PUSH BUTTON RETAINING PIN Goupille de fixation pour dito		x	x	x	5 7145
		54. 04.0118	Diode (Funkenlöschung) (Diode auf Relaissträger Serie III) DIODE, NOISE SUPPRESSION (DIODE ON RELAY - SOCKET SERIES III) Diode de déparasitage (sur support de relais série III)	50 V / 100 mA 50 V / 100 mA 50 V / 100 mA	x	x	x	4 7146
		50. 04.0128	Schaltdiode SWITCHING DIODE Diode de commutation	50 V / 500 mA 50 V / 500 mA 50 V / 500 mA			x	1
	03	1.736. 587	Kontakt feststehend CONTACT, STATIONARY Contact fixe		x			26 7147
	03	1.736. 592	Kontakt, feststehend CONTACT, STATIONARY Contact fixe			x	x	26 7148
		1.736. 591	Kipphebel kompl. PAXOLIN SWITCH LEVER Basculeur complet des contacts en H		x	x	x	5 7149
		1.736. 588	Kontakt H - Form MOVING H CONTACT Double contact en forme de H		x	x	x	8 7150
04	1.014. 300	Endschaltermagnet SOLENOID, PUSH BUTTON RELEASE Electro - aimant d'arrêt automatique		x	x	x	1 7151	
05	1.014. 910-01	Anker für alle Magnete SLUG, FOR ALL SOLENOID Noyau plongeur (pour tous les électro - aimants)		x	x	x	3 7152	

INDEX	Bestellnummer ORDER NUMBER	Beschreibung / PART DESCRIPTION	SERIE			An Qu	IND. III
			I	II	III		
A 06	1.736. 551-05	Blattfeder, Drucktastenverriegelung LEAF SPRING, LOCKING BAR Ressort de verrouillage des touches (lamelle)	x	x	x	3	7153
	1.736. 551-11	Kontaktzugfeder CONTACT SPRING Ressort de rappel des contacts en H (boudin)	x	x	x	8	7154
07	1.736. 551-07	Drucktastenfeder PUSH BUTTON SPRING Ressort de rappel des touches (boudin)	x	x	x	5	7155
	1.736. 150	Geschwindigkeitsumschalter kompl. SPEED SELECTOR SWITCH CPLT. Commutateur de vitesse complet	x	x	x	1	7156
	1.736. 151	Geschwindigkeitsumschalter kompl. 19/38 cms SPEED SELECTOR SWITCH CPLT. 7,5/15 ips Commutateur de vitesse complet 19/38 cms			x	1	
	1.736. 150-05	Segment Motor MOTOR WAFER Galette de commutation du moteur	x	x		1	7157
	1.736. 150-10	Segment Motor MOTOR WAFER Galette de commutation du moteur			x	1	7158
	1.736. 150-06	Segment Entzerrung EQUALIZATION WAFER Galette de commutation des corrections de courbe	x	x	x	1	7159
	1.736. 170	Aufnahmekanalumschalter kompl. RECORDING CHANNEL SELECTOR CPLT. Commutateur des canaux d'enregistrement complet	x	x	x	1	7160
	1.736. 170-03	Segment Oszillator OSZILLATOR WAFER Galette de commutation de l'oscillateur	x	x	x	1	7161
	1.736. 170-02	Segment Verstärker AMPLIFIER WAFER Galette de commutation des amplificateurs	x	x	x	1	7162

B

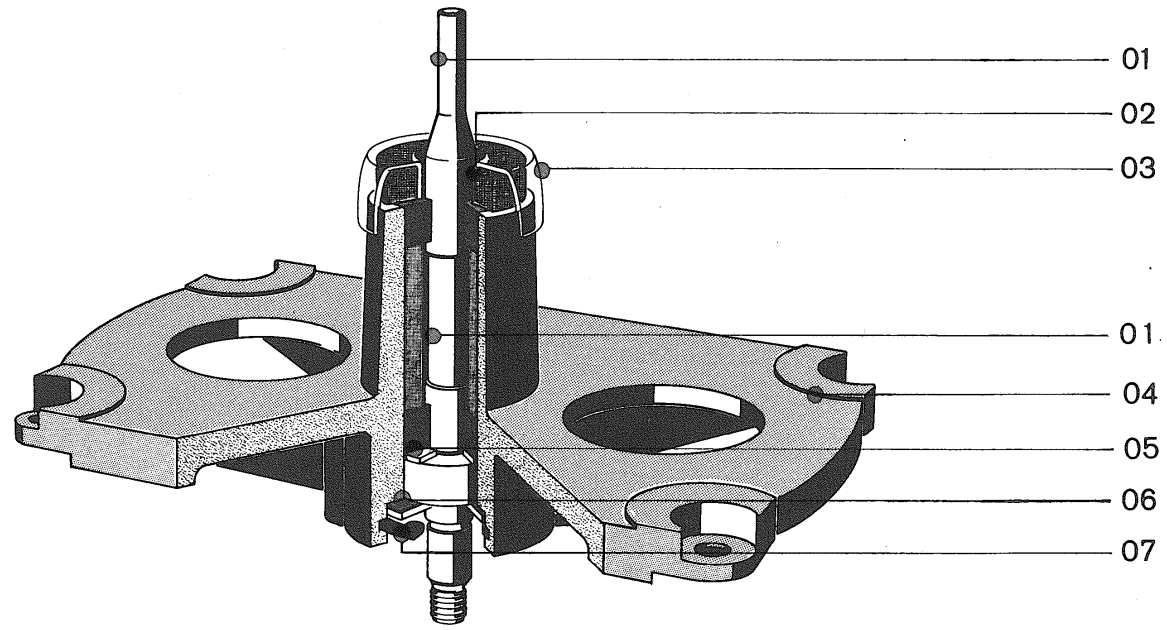


INDEX	Bestellnummer ORDER NUMBER	Beschreibung / PART DESCRIPTION	SERIE			An Qu	IND. III
			I	II	III		
B		Capstan - Aggregat CAPSTAN DRIVE ASSEMBLY Agrégat du cabestan					
		1.736. 125 Capstanaggregat ohne Bandlaufaggregat 50 Hz CAPSTAN DRIVE ASSY WITHOUT HEAD SUPPORT 50 Hz Agrégat du cabestan sans bloc défilement 50 Hz	x	x	x	1	
		1.736. 126 Capstanaggregat ohne Bandlaufaggregat 60 Hz CAPSTAN DRIVE ASSY WITHOUT HEAD SUPPORT 60 Hz Agrégat du cabestan sans bloc défilement 60 Hz	x	x	x	1	
		1.736. 120 Capstanaggregat ohne Bandlaufaggregat 19/38 cms 50 Hz 4/8 pol CAPSTAN DRIVE ASSY WITHOUT HEAD SUPPORT 7,5/15 ips 50 Hz 4/8 pol Agrégat du cabestan sans bloc défilement 19/38 cms 50 Hz 4/8 pol			x	1	
		1.736. 122 Capstanaggregat ohne Bandlaufaggregat 19/38 cms 50 Hz 6/12 pol CAPSTAN DRIVE ASSY WITHOUT HEAD SUPPORT 7,5/15 ips 50 Hz 6/12 POL Agrégat du cabestan sans bloc défilement 19/38 cms 50 Hz 6/12 pol			x	1	
	01	22. 01.8040 Sechskantmutter M 4 HEXAGON NUT M 4 Ecrou 6 - pans M 4	x	x	x	4	
	02	1.736. 125-01 Gewindebolzen THREADED MOUNTING STUD Boulon à double tige fileté M 4	x	x	x	4	7091
	03	Capstan - Lagergehäuse Siehe Abschnitt C CAPSTAN BEARING PLATE SEE SECT Berceau du cabestan Cf. alinéa					
	04	1.736. 136 Kupplungsstreifen für Schraubbefestigung (für Motor mit 2 Mitnehmerbolzen) COUPLING STRIP FOR SCREW MOUNTING (FOR MOTOR WITH 2 COUPLING PINS) Couplage silicone pour fixation à vis (pour moteur à 2 tétons d'entraînement)	x	x	x	2	7090
		21. 01.0355 Z - Schraube dazu (M 3x8) MACHINE SCREW FOR ABOVE (M 3x8) Vis cylindrique pour dito (M 3x8)	x	x	x	2	
04	1.736. 125-02 Kupplungsstreifen für Steckbefestigung (für Motor mit 4 Mitnehmerbolzen) COUPLING STRIP, PUSH-ON TYPE (FOR MOTOR WITH 4 COUPLING PINS) Couplage silicone à fixation par enfichage (pour moteur à 4 tétons d'entraînement)			x	4		

INDEX	Bestellnummer ORDER NUMBER	Beschreibung / PART DESCRIPTION	SERIE			An Qu	IND. III
			I	II	III		
B							
05	1.736. 134	Schwungmasse kompl. (für Motor mit 2 Mitnehmerbolzen) FLYWHEEL CPLT. (FOR MOTOR WITH 2 COUPLING PINS) Volant complet (pour moteur à 2 tétons d'entraînement)	x	x	x		7085
05	1.736. 135	Schwungmasse kompl. (für Motor mit 4 Mitnehmerbolzen) FLYWHEEL CPLT. (FOR MOTOR WITH 4 COUPLING PINS) Volant complet (pour moteur à 4 tétons d'entraînement)			x	1	
06	1.736. 128-07	Sicherungsscheibe WASHER Rondelle de sécurité en matière synthétique	x	x	x	1	
07	37. 01.0110	Tellerfeder SPRING WASHER Rondelle - ressort	x	x	x	1	
08	22. 01.5060	Sechskantmutter HEXAGON NUT Ecrou 6 - pans	x	x	x	1	
09	1.736. 138-02	Mitnehmerbolzen (für Motor mit 2 Mitnehmerbolzen) COUPLING PIN (FOR MOTOR WITH 2 COUPLING PINS) Téton d'entraînement (pour moteur à 2 tétons)	x	x	x	2	7089
09	1.736. 140-02	Mitnehmerbolzen (für Motor mit 4 Mitnehmerbolzen) COUPLING PIN (FOR MOTOR WITH 4 COUPLING PINS) Téton d'entraînement (pour moteur à 4 tétons)			x	4	
		Die Capstan - Motore unterscheiden sich durch die Anzahl der Mitnehmerbolzen. Alte Ausführung : 2 Mitnehmerbolzen und Kupplungsstreifen mit Schraubbefestigung. Neue Ausführung : 4 Mitnehmerbolzen und Kupplungsstreifen mit Steckbefestigung. Die Mitnehmerbolzen müssen separat bestellt werden. Two different types of capstan motors are used in the G 36 Old version : 2 Coupling pins and strips with screw mounting. New version : 4 Coupling pins and strips with push-on mounting. The coupling pins have to be ordered separately. Les moteurs de cabestan se différencient par le nombre des tétons d'entraînement. Ancienne exécution : 2 tétons et couplages silicone fixés par vis . Nouvelle exécution : 4 tétons et couplages silicone enfichables. Les tétons d'entraînement doivent être commandés indépendamment des moteurs.					
10	1.060. 060-01	Capstan - Motor 50 Hz Alt CAPSTAN - MOTOR 50 Hz OLD Moteur de cabestan 50 Hz Ancien	x	x	x	1	7079

INDEX	Bestellnummer ORDER NUMBER	Beschreibung / PART DESCRIPTION	SERIE			An Qu	IND. III
			I	II	III		
10	1.736. 141	Capstan - Motor 50 Hz Neu				1	
		CAPSTAN MOTOR 50 Hz NEW			x		
		Moteur de cabestan 50 Hz Nouveau					
	1.736. 140-01	Capstan - Motor 60 Hz Alt				1	7080
		CAPSTAN MOTOR 60 Hz OLD	x	x	x		
		Moteur de cabestan 60 Hz Ancien					
	1.736. 142	Capstan - Motor 60 Hz Neu				1	
		CAPSTAN MOTOR 60 Hz NEW			x		
		Moteur de cabestan 60 Hz Nouveau					
	1.736. 140-05	Capstan - Motor 50 Hz 19/38 cms 4/8 pol				1	7081
		CAPSTAN MOTOR 50 Hz 7,5/15 ips 4/8 POL			x		
		Moteur de cabestan 50 Hz 19/38 cms 4/8 pol					
10	1.736. 141	Capstan - Motor 50 Hz 19/38 cms 6/12 pol				1	
CAPSTAN MOTOR 50 Hz 7,5/15 ips 6/12 POL			x				
Moteur de cabestan 50 Hz 19/38 cms 6/12 pol							
11	1.060. 052-01	Motor - Gehäuse MOTOR HOUSING Bâti du moteur	x	x	x	1	
12	21. 01.0455	Z - Schraube M 4x8				4	7092
		MACHINE SCREW M 4x8	x	x	x		
		Vis cylindrique M 4x8					

C



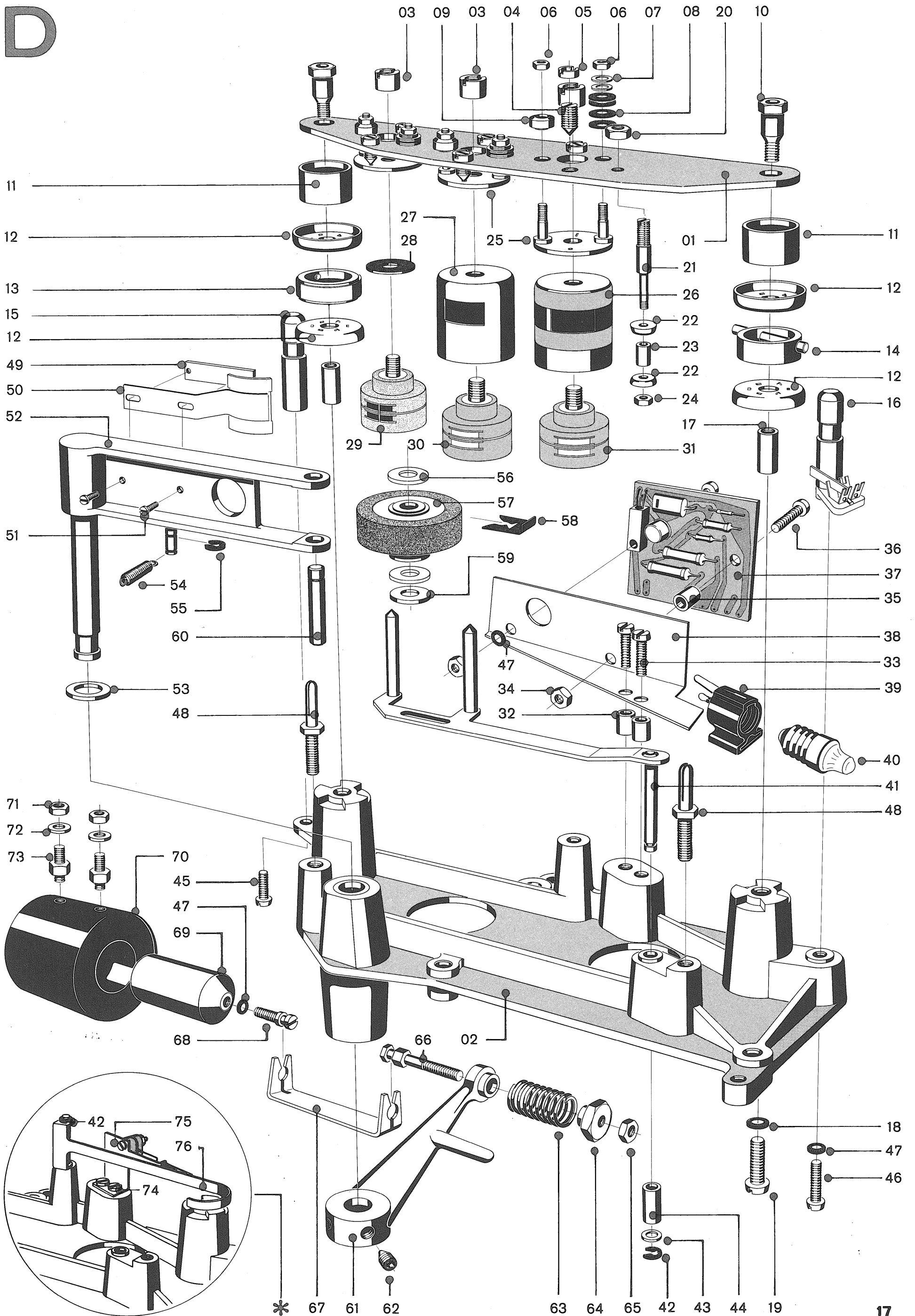
C

		Capstan - Lagergehäuse mit Achse CAPSTAN BEARING PLATE WITH SHAFT Berceau de cabestan avec axe							
	1.736. 128	Capstan - Lagergehäuse kompl. mit Achse CAPSTAN BEARING PLATE CPLT. WITH SHAFT Berceau de cabestan complet avec axe	50 Hz 50 Hz 50 Hz	x	x	x	1	7082	
	1.736. 129	Capstan - Lagergehäuse kompl. mit Achse CAPSTAN BEARING PLATE CPLT. WITH SHAFT Berceau de cabestan complet avec axe	60 Hz 60 Hz 60 Hz	x	x	x	1	7087	
01	1.736. 128-02	Capstanachse CAPSTAN SHAFT Axe de cabestan	50 Hz 50 Hz 50 Hz	(x)	(x)	x	1	7083	
	1.736. 129-02	Capstanachse CAPSTAN SHAFT Axe de cabestan	60 Hz 60 Hz 60 Hz		(x)	x	1	7088	
	1.736. 120-02	Capstanachse CAPSTAN SHAFT Axe de cabestan	50 Hz 19/38 cms 4/8 pol 50 Hz 7,5/15 ips 4/8 POL 50 Hz 19/38 cms 4/8 pol			x	1		
01	1.736. 122-02	Capstanachse CAPSTAN SHAFT Axe de cabestan	50 Hz 19/38 cms 6/12 pol 50 Hz 7,5/15 ips 6/12 POL 50 Hz 19/38 cms 6/12 pol			x	1	7084	
02	1.736. 128-08	Filzring FELT RING Rondelle de feutre	(Schmierung) (LUBRICATION) (lubrification)	x	x	x	1		

03	1.736. 128-06	Deckel GREASE CUP Capuchon		x	x	x	1	7086	
04	1.736. 130	Capstan - Lagergehäuse kompl. ohne Achse CAPSTAN BEARING PLATE WITHOUT SHAFT Berceau de cabestan complet sans axe		(x)	(x)	x	1		
05	1.062. 351-03	Lagerscheibe oben THRUST WASHER, TOP Coussinet supérieur (auto - graisseur)		x	x	x	1		
06	1.736. 128-04	Filzscheibe FELT WASHER Rondelle feutre		x	x		1		

INDEX	Bestellnummer ORDER NUMBER	Beschreibung / PART DESCRIPTION	SERIE			An Qu	IND. III
			I	II	III		
C 06	1.736. 125-03	Anlaufscheibe, Kunststoffbelag LOW FRICTION WASHER, PLASTIC COATED Rondelle synthétique d'appui			x	1	
		soll für Capstan - Lagergehäuse mit Filzscheibe (1.736.128-04) eine Anlaufscheibe mit Kunststoffbelag (1.736.125-03) Verwendung finden, so ist gleichzeitig auch die Stahlscheibe 1 mm (1.736.128-03) gegen eine Stahlscheibe 0,5 mm 1.736.125-04 zu ersetzen.					
		when replacing felt washer (1.736.128-04) with low friction washer (1.736.125-03) the steel shim 1 mm (1.736.128-03) has to be interchanged with a steel shim 1.736.125-04 of 0,5 mm thickness.					
		pour remplacer la rondelle de feutre (1.736.128-04) dans les berceaux de cabestan par une rondelle synthétique (1.736.125-03), il faut aussi remplacer la rondelle métallique de 1 mm (1.736.128-03) par une rondelle métallique de 0,5 mm (1.736.125-04).					
	1.736. 128-03	Stahlscheibe 1 mm STEEL SHIM 1 mm Rondelle métallique 1 mm	x	x		1	
	37. 02.0107	Tellerfeder EL 9 SPRING WASHER EL 9 Rondelle - ressort EL 9			x	1	
		Tellerfeder SPRING WASHER Rondelle - ressort	x	x		2	
07	24. 16.4240	Seeger - Innenring 24 TRUE - ARC RING 24 Circlips intérieur 24	x	x	x	1	

D



INDEX	Bestellnummer ORDER NUMBER	Beschreibung / PART DESCRIPTION	SERIE			An Qu	IND. III
			I	II	III		
D		Bandlauf - Aggregat HEAD SUPPORT BLOCK Bloc de défilement					
	1.736. 227	Bandlaufaggregat 2 - Spur kompl. mit Tonköpfen ohne Andruckarm HEAD SUPPORT BLOCK CPLT. WITH 2 - TRACK HEADS WITHOUT PINCH - ROLLER ARM Bloc de défilement complet 2 - pistes avec têtes, sans bras de galet presseur	x	x	x		
	1.736. 228	Bandlaufaggregat 4 - Spur kompl. mit Tonköpfen ohne Andruckarm HEAD SUPPORT BLOCK CPLT. WITH 4 - TRACK HEADS WITHOUT PINCH - ROLLER ARM Bloc de défilement complet 4 - pistes avec têtes, sans bras de galet presseur	x	x	x		
	1.736. 229	Bandlaufaggregat 2 - Spur kompl. mit Tonköpfen 19/38 cms 6/12 pol HEAD SUPPORT BLOCK CPLT. WITH 2 -TRACK HEADS 7,5/15 ips 6/12 POL Bloc de défilement complet 2 - pistes avec têtes, 19/38 cms 6/12 pol					
	01	1.736. 226-01 Kopfleiste leer HEAD MOUNTING PLATE , BARE Plaque support des têtes	x	x	x	1	7076
		1.736. 226 Kopfleiste kompl. ohne Köpfe HEAD MOUNTING PLATE, CPLT. WITHOUT HEADS Plaque support des têtes complète sans têtes	x	x	x	1	
	02	1.736. 224 Bandlaufchassis leer (inkl. 19/38 cms 4/8 pol) HEAD SUPPORT BLOCK BARE (INCL. 7,5/15 ips 4/8 POL) Chassis de défilement vide (incl. 19/38 cms 4/8 pol)	x	x	x	1	
	02	1.736. 225 Bandlaufchassis leer 19/38 cms 6/12 pol HEAD SUPPORT BLOCK BARE 7,5/15 ips 6/12 POL Chassis de défilement, vide 19/38 cms 6/12 pol			x	1	
	03	1.736. 226-02 Schlitzmutter (Kopfbefestigung) SLOTTED NUT (HEAD MOUNTING) Ecrou fendu de fixation des têtes	x	x	x	3	7052
	04	1.736. 226-05 Gewindestift spez. (Kopfhöheneinstellung) SCREW (VERTICAL ADJUSTER) Pointeau de hauteur des têtes	x	x	x	6	7054
05	1.736. 226-04 Schlitzmutter (Kopfhöheneinstellung) SLOTTED NUT (VERTICAL ADJUSTER) Ecrou de blocage pour dito	x	x	x	6	7053	
06	22. 01.8026 Sechskantmutter M 2,6 HEXAGON NUT M 2,6 Ecrou 6 - pans M 2,6	x	x	x	6	7057	
07	23. 01.1032 Unterlagscheibe WASHER Rondelle	x	x	x	6		
08	37. 01.0101 Tellerfeder 3,2 / 8 SPRING WASHER 3,2 / 8 Rondelle - ressort 3,2 / 8	x	x	x	12	7056	

INDEX	Bestellnummer ORDER NUMBER	Beschreibung / PART DESCRIPTION	SERIE			An Qu	IND. III
			I	II	III		
D 09	1.736. 226-07	Schwenkscheibe (Spalteinstellung) SPACER, AZIMUTH ADJUSTER Entretoise basculante d'azimutage	x	x	x	3	7055
10	1.736. 222-01	Zentrierschraube (Kopfabdeckung geschraubt) HEAD BLOCK FIXING SCREW (SCREW - ON HEAD COVER) Vis de centrage du support des têtes (pour appareil à cache vissable)	x	x		2	7138
10	1.736. 222-09	Zentrierschraube (Kopfabdeckung gesteckt) HEAD BLOCK FIXING SCREW (PLUG - IN HEAD COVER) Vis de centrage du support des têtes (pour appareil à cache enfichable.)			x	2	7139
11	1.736. 222-07	Zwischenrohr TUBULAR SPACER Tube intermédiaire	x	x	x	2	
12	1.736. 222-04	Führungshaube TAPE GUIDE CUP Flasque inférieure ou supérieure du guide de bande	x	x	x	4	7133
13	1.736. 222-05	Bandumlenrohr links TAPE GUIDE CENTRE PIECE LEFT Guide de bande gauche	x	x		1	7136
13	1.736. 221	Bandumlenrohr links TAPE GUIDE CENTRE PIECE , LEFT Guide de bande gauche			x	1	7137
14	1.736. 222-06	Bandumlenrohr rechts (mech. Endschalter) TAPE GUIDE CENTRE PIECE, RIGHT (MECH.AND SWITCH) Guide de bande droit (arrêt automatique mécanique)	x	x		1	7134
14	1.027. 114	Bandumlenrohr rechts (opt. Endschalter) TAPE GUIDE CENTRE PIECE , RIGHT OPT.AND SWITCH) Guide de bande droit (arrêt automatique optique)			x	1	7135
15	1.736. 222-08	Umlenkbolzen links (Serie I + II auch rechts) TAPE GUIDE POST, LEFT (SER. I + II ALSO RIGHT) Pivot externe de guidage gauche (et droit dans les séries I et II)	x	x	x	2	7037
16	1.736. 250	Umlenkbolzen rechts (opt. Endschalter) TAPE GUIDE POST, RIGHT (OPT. AND SWITCH) Pivot externe de guidage droit (arrêt automatique optique)			x	1	7038
	57. 99.0132	Photowiderstand ORP 62 PHOTORESISTOR ORP 62 Photo - résistance ORP 62			x	1	7039
17	1.736. 222-03	Gewindebüchse THREADED BUSHING Manchon taraudé	x	x	x	2	
18	24. 16.1040	Sicherungsscheibe M 4 LOCK WASHER M 4 Rondelle Grower M 4	x	x	x	2	
19	21. 01.0456	Z - Schraube M 4x10 MACHINE SCREW M 4x10 Vis cylindrique M 4x10	x	x	x	2	
20	22. 01.8030	Sechskantmutter M 3 HEXAGON NUT M 3 Ecrou 6 - pans M 3	x	x	x	1	

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			I	II	III		
D							
21	1.736. 232-01	Bolzen PIN Tige décolletée du pivot de guidage vertical du ruban	x	x	x	1	
22	1.736. 232-03	Führungsscheibe GUIDE WASHER Flasques de guidage	x	x	x	2	
23	1.736. 232-02	Distanzhülse SPACER Entretoise	x	x	x	1	
24	22. 01.8020	Sechskantmutter M 2 HEXAGON NUT M 2 Ecrou 6 - pans M 2	x	x	x	1	
21-24	1.736. 232	Bandführung kompl. TAPE GUIDE PIN CPLT. Pivot complet de guidage vertical du ruban	x	x	x	1	7058
25	1.020. 127	Justierplatte kompl. HEAD MOUNTING DISE CPLT. Assiete d'alignement complète	x	x	x	3	7051
26 27	1.736. 226-06	Abschirmtopf SHIELDING - CAN Pot de blindage	x	x	x	2	7049
28	1.736. 501-04	Scheibe WASHER Rondelle	x	x	x	1	
29	1.017. 240	Löschkopf 2-Spur ERASE HEAD 2-TRACK Tête d'effacement 2-p.	x	x	x	1	7043
		nachfolgende Pos. beachten ! CHECK SERIAL NUMBER OF RECORDER !					
	1.017. 300	Löschkopf 4-Spur ERASE HEAD 4-TRACK Tête d'effacement 4-p.	x	x	x	1	7044
		Attention aux positions suivantes					
	1.017. 241	Löschkopf 2-Spur ERASE HEAD 2-TRACK Tête d'effacement 2-p.			x	1	
		ab Nr. / FROM NO. / Numéros 69701 und höher / UP AND FOR / et suyvants					
29	1.017. 301	Löschkopf 4-Spur ERASE HEAD 4-TRACK Tête d'effacement 4-p.			x	1	
		sowie für Nr. / AND FOR NO. 60101-60700 65101-68500					
30	1.017. 360	Aufnahmekopf 2 - Spur RECORDING HEAD 2 - TRACK Tête d'enregistrement 2 - pistes	x	x	x	1	7045
30	1.017. 380	Aufnahmekopf 4 - Spur RECORDING HEAD 4 - TRACK Tête d'enregistrement 4 - pistes	x	x	x	1	7046
31	1.017. 370	Wiedergabekopf 2 - Spur PLAYBACK HEAD 2 - TRACK Tête de reproduction 2 - pistes	x	x	x	1	7047
31	1.017. 390	Wiedergabekopf 4 - Spur PLAYBACK HEAD 4 - TRACK Tête de reproduction 4 - pistes	x	x	x	1	7048

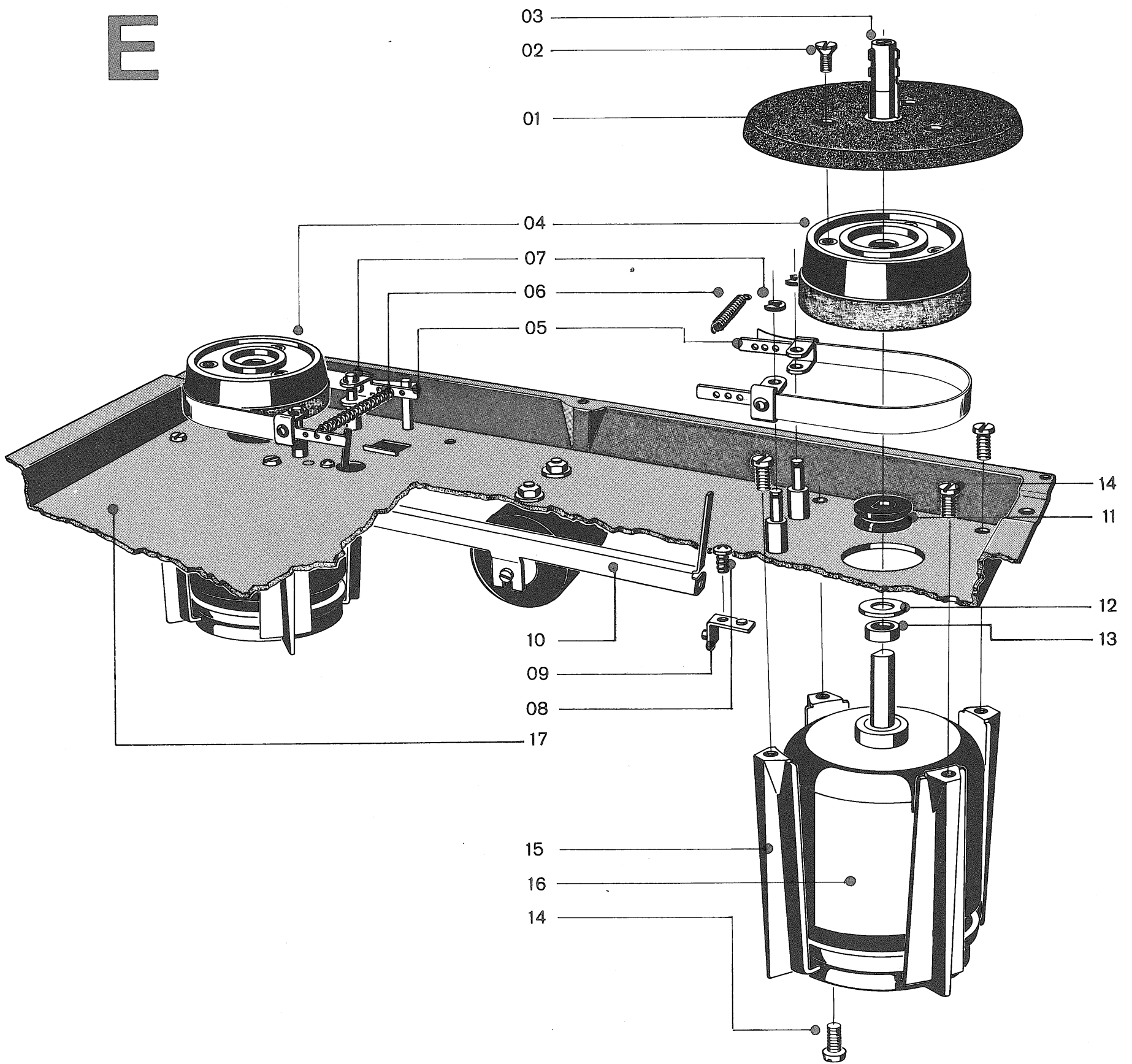
INDEX	Bestellnummer ORDER NUMBER	Beschreibung / PART DESCRIPTION	SERIE			An Qu	IND. III
			I	II	III		
D							
32	1.736. 237-02	Distanzhülsen TUBULAR SPACER Entretoises			x	2	
33	21. 01.0356	Z - Schraube M 3x10 MACHINE SCREW M 3x10 Vis cylindrique M 3x10			x	2	
34	22. 01.8030	Sechskantmutter M 3 HEXAGON NUT M 3 Ecrou 6 - pans M 3			x	2	
35	1.736. 237-02	Distanzhülse TUBULAR SPACER Entretoise			x	1	
36	21. 01.0357	Z - Schraube M 3x12 MACHINE SCREW M 3x12 Vis cylindrique M 3x12			x	2	
37	1.736. 239	Endschalterplatte bestückt AUTO - STOP AMPLIFIER CPLT. Circuit imprimé d'arrêt automatique, monté			x	1	7063
	50. 03.0210	Transistor AC 124 TRANSISTOR AC 124 Transistor AC 124			x	1	7065
	50. 03.0421	Transistor RT 9448 TRANSISTOR RT 9448 Transistor RT 9448			x	1	7066
38	1.736. 237-01	Winkel MOUNTING BRACKET Equerre de fixation du circuit			x	1	
39	53. 99.0114	Lampenfassung E - 10 LAMP SOCKET Doille de lampe E - 10			x	1	7068
40	51. 99.0108	Glühlampe OSRAM 10 - 3644 (3,7 V / 0,3 A mit Linse) MINIATURE LAMP OSRAM 10 -3644 (3,7 V / 0,3 A WITH LENS) Lampe à incandescence OSRAM 10 - 3644 (3,7 V / 0,3 A avec lentille)			x	1	7067
41	1.736. 219	Bandabhebung alt TAPE LIFT LEVER OLD Cavaliers et levier de rappel du ruban ancien	x	x		1	7077
	24. 16.3032	dazu Benzingsicherung RETAINING RING FOR ABOVE Circlips pour dito	x	x		1	
41	1.736. 220	Bandabhebung neu TAPE LIFT LEVER NEW Cavaliers et levier de rappel du ruban nouveau			x	1	7078
42	24. 16.3023	Benzingsicherung RETAINING RING Circlips pour dito	x	x	x	1	

INDEX	Bestellnummer ORDER NUMBER	Beschreibung / PART DESCRIPTION	SERIE			An Qu	IND. III
			I	II	III		
D							
43	23. 01.1032	Unterlagscheibe WASHER Rondelle pour dito			x	1	
44	1.736. 150-08	Distanzhülse TUBULAR SPACER Entretoise pour dito			x	1	
45 46	21. 01.0356	Z- Schraube M 3x10 MACHINE SCREW M 3x10 Vis cylindrique M 3x10	x	x	x	2	7040
47	24. 16.1030	Sicherungsscheibe M 3 LOCK WASHER M 3 Rondelle Grower M 3	x	x	x	4	
48	1.736. 500-05	Fangstift (Andruckarmabdeckung) MOUNTING LUG (PINCH ROLLER COVER) Fiche de fixation pour cache du galet presseur	x	x	x	2	7023
49	1.736. 500-06	Gewindeplatte THREADED PLATE Contre - plaquette taraudée du blindage	x	x	x	1	
50	1.736. 793	Abschirmung kompl. FACE SHIELD CPLT. Blindage complet	x	x	x	1	7050
51	21. 01.0203	Z - Schraube M 2x5 MACHINE SCREW M 2x5 Vis cylindrique M 2x5	x	x	x	2	
52	1.736. 201	Andruckarm PINCH ROLLER ARM Bras du galet presseur	x	x	x	1	
53	1.736. 502-12	Scheibe (Kunststoff) PAXALIN WASHER Rondelle synthétique	x	x	x	1	
54	1.736. 502-09	Rückstellfeder RETURN SPRING Ressort de rappel du galet presseur	x	x	x	1	7110
55	24. 16.3032	Benzingsicherung RETAINING RING Circlips	x	x	x	1	
56	1.736. 200-04	Distanzscheibe (Teflon) TEFLON SPACER Rondelle (Teflon)	x	x	x	2	
57	1.736. 205	Andruckrolle kompl. PINCH ROLLER Galet presseur complet	x	x	x	1	7109
58	1.736. 200-03	Klemme für Andruckrollenachse CLIP, PINCH ROLLER CPLT. Circlips pour axe du galet presseur	x	x	x	1	7112
59	1.736. 501-06	Distanzscheibe SPACER Rondelle	x	x	x	1	7113

INDEX	Bestellnummer ORDER NUMBER	Beschreibung / PART DESCRIPTION	SERIE			An Qu	IND. III
			I	II	III		
D							
60	1.736. 200-02	Achse für Andruckrolle PINCH ROLLER SPINDLE Axe du galet presseur	x	x	x	1	7111
61	1.736. 275-01	Hebel LEVER Levier d'entraînement du galet presseur	x	x	x	1	
62	21. 59.6504	IS - Gewindestift M 5x6 ALLENSCREW M 5x6 Vis imbus sans tête M 5x6	x	x	x	2	
63	1.736. 275-05	Druckfeder COMPRESSION SPRING Ressort boudin à pression	x	x	x	1	
64	1.736. 275-03	Justiermutter ADJUSTING NUT Ecrou de réglage	x	x	x	1	
65	22. 01.8040	Sechskantmutter M 4 HEXAGON NUT M 4 Contre - écrou M 4	x	x	x	1	
66	1.736. 275-02	Spindel SPINDLE Tige filetée de traction	x	x	x	1	
67	1.736. 275-04	Zugbügel BRAKET Etrier intermédiaire	x	x	x	1	
68	1.014. 910-02	Spezialschraube SPECIAL SCREW Vis décolletée spéciale	x	x	x	1	
69	1.014. 910-01	Anker für alle Magnete SLUG, FOR ALL SOLENOIDS Noyau plongeur pour tous les électro - aimants	x	x	x	3	7114
70	1.736. 375	Andruckmagnet PINCH ROLLER SOLENOID Electro - aimant	x	x	x	1	7115
	(1.014. 300	Endschaltermagnet) PUSH BUTTON RELEASE SOLENOID) Electro - aimant arrêt automatique)	x	x	x	1	7151
	(1.736. 378	Bremsmagnet) BRAKE SOLENOID) Electro - aimant freins)	x	x	x	1	7107
71	22. 01.8040	Sechskantmutter M 4 für Andruck- und Bremsmagnet HEXAGON NUT M 4 FOR PINCH ROLLER AND BRAKE SOLENOID Ecrou 6 - pans M 4 pour électro-aimant de galet presseur et de freins	x	x	x	4	
72	23. 01.2043	Unterlagscheibe für Andruck- und Bremsmagnet WASHER FOR PINCH ROLLER AND BRAKE SOLENOID Rondelle pour électro-aimant de galet presseur et de freins	x	x	x	4	

INDEX	Bestellnummer ORDER NUMBER	Beschreibung / PART DESCRIPTION	SERIE			An Qu	IND. III
			I	II	III		
D 73	1.736. 375-01	Gewindebolzen für Andruck- und Bremsmagnet THREADED STUD FOR PINCH ROLLER AND BRAKE SOLENOID Boulon à double tige fileté pour électro-aimant de galet presseur et de freins	x	x	x	4	7116
*		Mechanischer Endschalter MECHANICAL AND OF TAPE SWITCH Arrêt automatique mecanique					
	1.736. 234	Bandendschalter kompl. Serie Nr. 35001 - 36500 END OF TAPE SWITCH CPLT. NO. 35001 - 36500 Contact d'arrêt automatique cplt. série 35001 -36500	x			1	7059
	1.736. 234-02	Kontaktzugfeder Serie Nr. 35001 - 36500 CONTACT SPRING NO. 35001 - 36500 Ressort de rappel pour dito No. 35001 - 36500	x			1	7061
		<u>Bandendschalter Serie No. 36501-inkl. Serie II</u> <u>END OF TAPE SWITCH SER. NO. 36501-INCL. SERIES II</u> <u>Contact d'arrêt automatique série I dés 36500 et série II</u>					
74	21. 01.0354	Z - Schrauben M 3x6 MACHINE SCREW M 3x6 Vis cylindrique M 3x6	x	x		2	
75	1.736. 238	Banddruckschalter kompl. mit Montagewinkel TAPE PRESSURE SWITCH CPLT. WITH MOUNTING BRACKET Contacteur complet avec équerre de fixation	x	x		1	7060
76	1.736. 222-02	Endschalterbügel LEVER, AND OF TAPE SWITCH Palpeur (arrêt automatique)	x	x		1	7062

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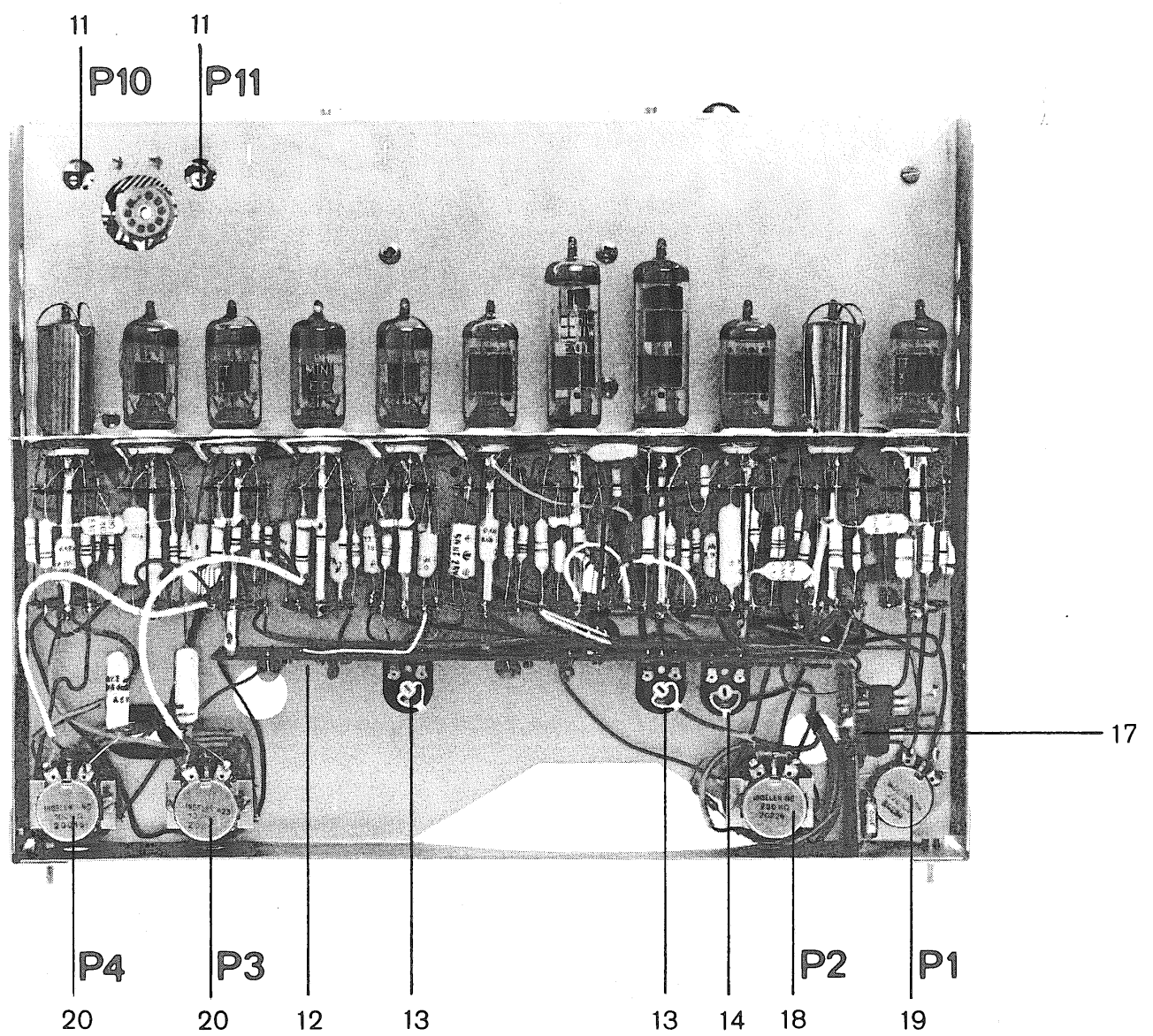
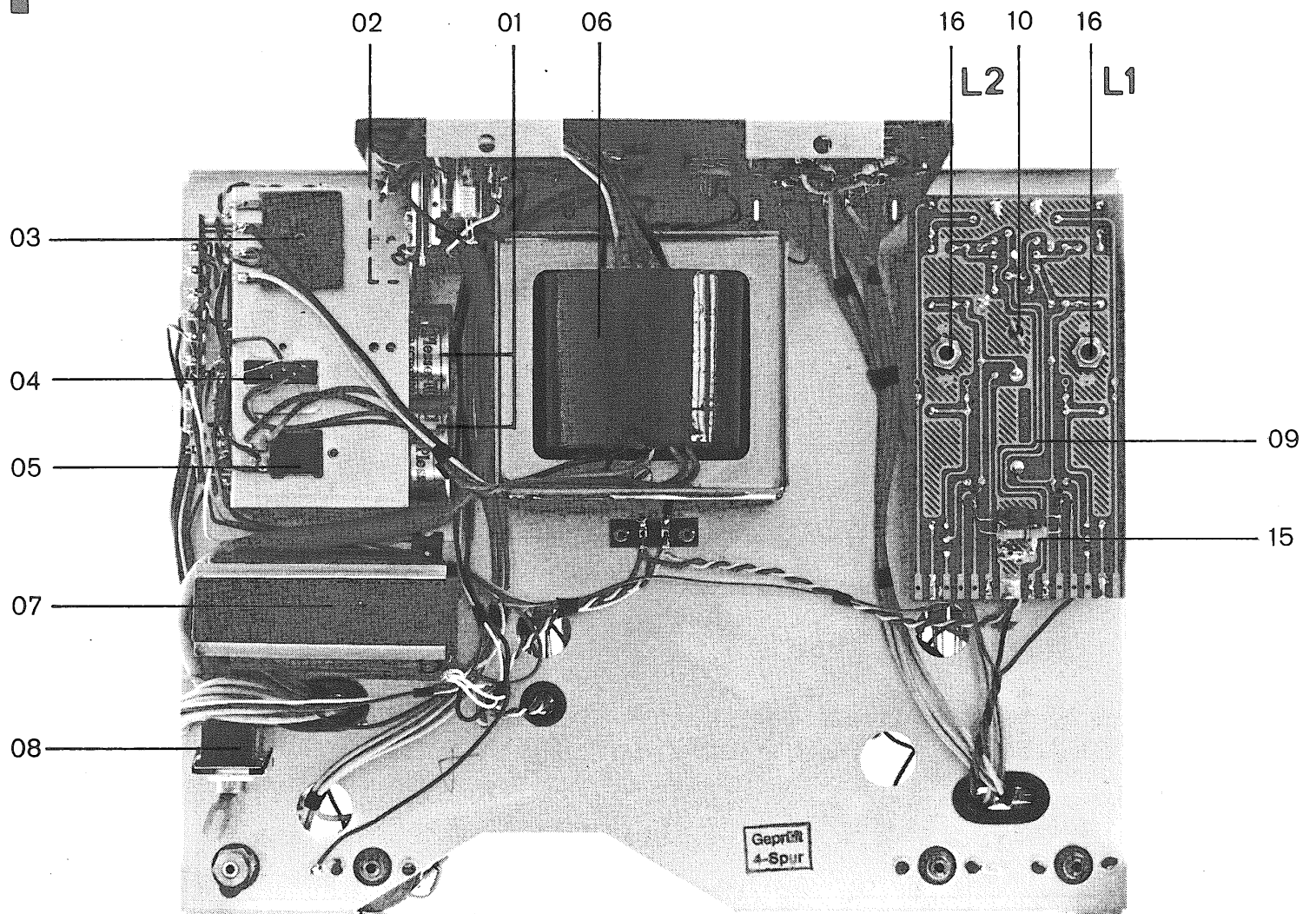
Bremssystem - Wickelmotoren BRAKES - SPOOLING MOTORS Freins et moteurs de rebobinage						
01	1.736. 794	Spulenteller - Untersatz kompl. TURNTABLE WITH SHAFT SECTION Plateau de bobine complet	x	x	x	2 7100
02	21. 02.3355	LS - Schraube M 3x8 MACHINE SCREW OVAL HEAD M 3x8 Vis goutte de suif M 3x8	x	x	x	6 7104
03	1.736. 794-01	Führungshülse (Dreizack) SHAFT SECTION, UPPER Tricorne de blocage	x	x	x	2 7101
	1.736. 794-02	Schaftschraube SHAFT SCREW Vis de fixation pour dito	x	x	x	2 7102

INDEX	Bestellnummer ORDER NUMBER	Beschreibung / PART DESCRIPTION	SERIE			An Qu	IND. III	
			I	II	III			
E	1.736. 794-03	Druckfeder, zu Dreizack REEL LOCK SPRING Ressort de pression pour dito	x	x	x	2	7103	
	04 1.736. 360	Bremsrolle kompl. BRAKE DRUM CPLT. Tambour de frein complet	x			2	7096	
	04 1.736. 358	Bremsrolle kompl. BRAKE DRUM CPLT. Tambour de frein complet		x	x	2	7097	
		Bremsbelag (Halbleinenband) per Meter lieferbar BRAKE LINING, AVAILABLE BY THE YARD Garniture de frein en fibre végétale (livrable au mètre)						
		1.736. 360-01	Spannfeder, Bremsrollenbefestigung MOUNTING SPRING, BRAKE DRUM Bague de serrage (fixation du tambour)	x	x	x		7098
	05 1.736. 351	Bremsband kompl. mit Montagewinkel BRAKE BAND CPLT. WITH MOUNTING BRACKETS Bande de frein métallique complète (avec équerre de montage)	x	x	x	2	7105	
	06 1.736. 502-10	Bremszugfeder BRAKE TENSION SPRING Ressort de rappel de frein	x	x	x	2	7106	
	07 24. 16.3032	Benzingsicherung RETAINING RING Circlips	x	x	x	4		
	08 20. 21.7153	Z - Blechschraube 4x7/4" SELF TAPPING SCREW 4x7/4" Vis Parker 4x7/4"	x	x	x	2		
	09 1.736. 502-07	Winkel ANGLE BRACKET Equerre	x	x	x	2		
	10 1.736. 502-14	Bremsgabel BRAKE RELEASE ARM Etrier de déblocage des freins	x	x	x	1		
	11 1.736. 502-02	Zählerantriebsrolle COUNTER PULLEY Poulie d'entraînement du compteur	x	x	x	1	7127	
	12 1.736. 502-05	Distanzscheibe links und rechts 0,5 mm SHIM WASHER LEFT AND RIGHT 0,5 mm Rondelle du niveau droit ou gauche 0,5 mm	x	x	x	2		
	1.736. 502-04	Distanzscheibe 0,2 mm, für Höhenkorrektur der Bremsrolle (nach Bedarf) SHIM WASHER 0,2 mm FOR HEIGHT ADJUSTMENT OF BRAKE DRUM Rondelle d'ajustage du niveau du tambour 0,2 mm selon nécessité						
13 1.736. 502-17	Distanzhülse rechts TUBULAR SPACER RIGHT Entretoise droite	x	x	x	1			

INDEX	Bestellnummer ORDER NUMBER	Beschreibung / PART DESCRIPTION	SERIE			An Qu	IND. III	
			I	II	III			
E	1.736. 502-16	Distanzhülse links TUBULAR SPACER LEFT Entretoise gauche	x	x	x	1		
	14	21. 01.0455	Z - Schraube M 4x8 MACHINE SCREW M 4x8 Vis cylindrique M 4x8	x	x	x	16	
	15	1.736. 103-02	Gehäuse zu Wickelmotoren MOUNTING BRACKET, SPOOLING MOTOR Bâti de moteur de rebobinage		x	x	2	7095
	16	1.736. 002-03	Wickelmotor 50 Hz SPOOLING MOTOR 50 Hz Moteur de rebobinage 50 Hz	x			1	7093
		1.736. 103-01	Wickelmotor 50 Hz SPOOLING MOTOR 50 Hz Moteur de rebobinage 50 Hz		x	x	1	7094
	16	1.736. 515-01	Wickelmotor 60 Hz SPOOLING MOTOR 60 Hz Moteur de rebobinage 60 Hz		x	x	1	
	17	1.736. 520	Laufwerkchassisblech kompl. MOTOR DECK CPLT. Platine (tôle emboutie complète)		x	x	1	
		1.736. 521	Laufwerkchassisblech kompl. 19/38 cms MOTOR DECK CPLT. 7,5/15 ips Platine (tôle emboutie complète) 19/38 cms			x	1	
		1.736. 378	Bremsmagnet BRAKE SOLENOID Electro - aimant des freins	x	x	x	1	7107
			Befestigung, für Bremsmagnet siehe Index B 71 - 73 MOUNTING STUD FOR BRAKE SOLENOID SEE INDEX B 71 - 73 Pour la fixation de cet électro - aimant, Cf. Index B 71 - 73					7108
		59. 15.4209	Motorkondensator 2 µF Capstanmotor 50 Hz MOTOR CONDENSER 2 µF CAPSTAN MOTOR 50 Hz Condensateur de déphasage du moteur de cabestan 2 µF 50 Hz	x	x		1	7117
		59. 99.0154	Motorkondensator 2 + 0,5 µF Capstanmotor 50 Hz MOTOR CONDENSER 2 + 0,5 µF CAPSTAN MOTOR 50 Hz Condensateur de déphasage du moteur de cabestan 2 + 0,5 µF 50 Hz			x	2	7118
		59. 15.4309	Motorkondensator 3 µF Wickelmotor 50 Hz MOTOR CONDENSER 3 µF SPOOLING MOTOR 50 Hz Condensateur de déphasage du moteur de rebobinage 3 µF 50 Hz	x	x		1	7119
		59. 15.4359	Motorkondensator 3,5 µF Wickelmotor 50 Hz MOTOR CONDENSER 3,5 µF SPOOLING MOTOR 50 Hz Condensateur de déphasage du moteur de rebobinage 3,5 µF 50 Hz			x	2	7120

INDEX	Bestellnummer ORDER NUMBER	Beschreibung / PART DESCRIPTION	SERIE			An Qu	IND. III
			I	II	III		
	1.736. 002-08	Zählwerk TURNS COUNTER Compteur	x			1	7121
	1.736. 502-15	Zählwerk TURNS COUNTER Compteur		x		1	7122
	1.736. 502-15	Zählwerk TURNS COUNTER Compteur			x	1	7123
	1.736. 851-07	Fenster - Zählwerk LENS COUNTER Fenêtre plexi de protection du compteur		x	x	1	7124
	31. 99.0101	Zählersaite BELT FOR COUNTER Courroie de compteur	x			1	7125
	31. 99.0106	Zählersaite BELT FOR COUNTER Courroie de compteur		x	x	1	7126
	1.736. 365	Bandzugumschalter TAPE TENSION SWITCH Commutateur de tension du ruban	x	x	x	1	7069
	1.736. 500-12	Bandzugumschalter - Hebel TAPE TENSION SWITCH LEVER Lever pour dito	x	x		1	7070
	1.736. 500-12	Bandzugumschalter - Hebel TAPE TENSION SWITCH LEVER Lever pour dito			x	1	7071
	1.094. 001	Relais Ser. No. 35001 - 36500 RELAY SER. NOS. 35001 - 36500 Relais série 35001 - 36500				1	7072
	1.093. 002	Relais Ser. No. 36501 - 48400 RELAY SER. NOS. 36501 - 48400 Relais série 36501 - 48400				1	7073
	1.093. 004	Relais Ser. No. 48401 - inkl. Serie II RELAY SER. NOS. 48401 - INCL. SER. II Relais série I dès 48401 - et série II				1	7074
	56. 04.0112	Relais Ser. No. 58001 - und höher RELAY SER. NOS. 58001 - AND UP Relais série 58001 - et suivants			x	1	7075

F



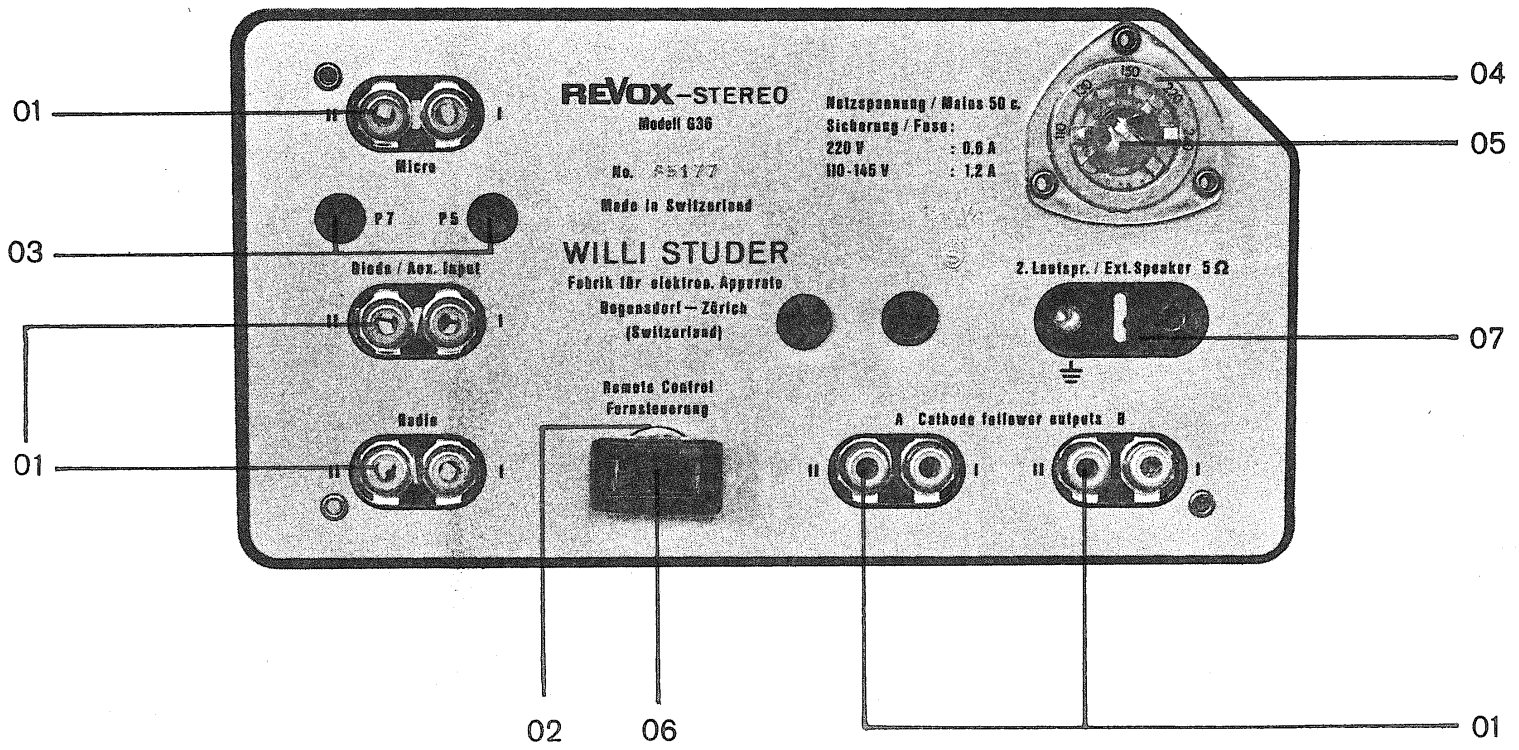
INDEX	Bestellnummer ORDER NUMBER	Beschreibung / PART DESCRIPTION	SERIE			An Qu	IND. III
			I	II	III		
F		Verstärker - Chassis AMPLIFIER - CHASSIS Chassis des amplificateurs					
01	59. 12.0103	Elco 3 x 50 µF 350 V ELECTROLYTIC CONDENSER 3 x 50 µF 350 V Condensateur électrolytique 3 x 50 µF 350 V	x	x	x	2	7163
02	59. 12.0106	Elco 3 x 600 µF 35 V ELECTROLYTIC CONDENSER 3 x 600 µF 35 V Condensateur électrolytique 3 x 600 µF 35 V	x	x	x	1	7164
03	70. 01.0131	Selengleichrichter B 30 C 1000 / 600 vergossen RECTIFIER B 30 C 1000 / 600 SEALED Redresseur au sélénium B 30 C 1000 / 600 moulé	x	x	x	1	7165
04	70. 01.0102	Selengleichrichter B 250 C 100 RECTIFIER B 250 C 100 Redresseur au sélénium B 250 C 100	x			1	7166
04	70. 01.0161	Selengleichrichter B 250 C 100 vergossen RECTIFIER B 250 C 100 SEALED Redresseur au sélénium B 250 C 100 moulé		x	x	1	7167
05	70. 01.0121	Selengleichrichter B 30 C 250 RECTIFIER B 30 C 250 Redresseur au sélénium B 30 C 250	x	x	x	1	7168
06	1.736. 648	Netztransformator 50 Hz MAINS TRANSFORMER 50 Hz Transformateur d'alimentation 50 Hz	x	x	x	1	7169
	1.736. 654	Netztransformator 60 Hz MAINS TRANSFORMER 60 Hz Transformateur d'alimentation 60 Hz		x	x	1	7170
06	1.736. 650	Netztransformator Semko MAINS TRANSFORMER SEMKO Transformateur d'alimentation Semko	x	x	x	1	7171
07	1.736. 660	Ausgangstransformer OUTPUT TRANSFORMER Transformateur de sortie	x	x	x	1	7172
09	1.736. 680	HF - Oszillator kompl. (ohne Röhre) BIAS OSCILLATOR CPLT. (LESS TUBE) Oszillateur HF complet sans tube	x	x	x	1	7173
10	1.736. 682	Oszillatorspule T 854, ohne Kern OSCILLATOR COIL T 854, LESS FERRITE HOUSING Bobine d'oscillateur T 854 sans pot de ferrite	x	x	x	1	7174
		nachfolgende Pos. beachten ! CHECK SERIAL NUMBER OF RECORDER ! Attention aux positions suivantes					

INDEX	Bestellnummer ORDER NUMBER	Beschreibung / PART DESCRIPTION	SERIE			An Qu	IND. III
			I	II	III		
F	1.736. 681	HF-Oszillator kompl. 2-Spur BIAS OSCILLATOR CPLT. 2-TRACK Oscillateur HF complet 2-pistes			x	1	
	1.736. 689	HF-Oszillator kompl. 4-Spur BIAS OSCILLATOR CPLT. 4-TRACK Oscillateur HF complet 4-pistes			x	1	
	1.736. 683	Oszillatorspule T 854 BIAS OSCILLATOR T 854 Bobine d'oscillateur T 854			x	1	
	61. 01.0163	Schalenkerne zu Oszillatorspule OSCILLATOR COIL HOUSING Pot de ferrite pour bobine d'oscillateur	x	x	x	2	7175
11	58. 20.1104	Potentiometer 100 k (P 10 + P 11) für Vormagnetisierung POTENTIOMETER 100 k (P 10 + P 11) BIAS ADJUST Potentiomètre 100 k (P 10 + P 11) pour réglage de prémagnétisation	x	x	x	2	7176
	59. 16.0122	Trimmer 20 - 150 pf. für HF - Oszillator TRIMMER CONDENSER 20 - 150 PF, BIAS OSCILLATOR Trimmer 20 - 150 pF pour oscillateur HF	x	x	x	1	7177
12	1.736. 480	Entzerrerplatte (Printplatte, kompl.) inkl. Trimm-pot und VU - Meter-Verstärker 2 - Spur 50 Hz EQUALIZER PANEL (PRINTED CIRCUIT CPLT.) INCL. TRIMM - POTMETER AND VU - METER AMPLIFIER 2 - TRACK 50 Hz Circuit imprimé de correction, y compris pot. ajustable et amplificateur des VU-mètres. 2 - pistes 50 Hz	x	x	x	1	7178
	1.736. 486	Entzerrerplatte kompl. 2-Spur 60 Hz NAB EQUALIZER PANEL CPLT. 2-TRACK 60 Hz NAB Circuit imprimé de correction cplt. 2-pistes 60 Hz NAB	x	x	x	1	
	1.736. 481	Entzerrerplatte kompl. 4-Spur 50 Hz EQUALIZER PANEL CPLT. 4-TRACK 50 Hz Circuit imprimé de correction cplt. 4-pistes 50 Hz	x	x	x	1	
	1.736. 487	Entzerrerplatte kompl. 4-Spur 60 Hz NAB EQUALIZER PANEL CPLT. 4-TRACK 60 Hz NAB Circuit imprimé de correction cplt. 4-pistes 60 Hz NAB	x	x	x	1	
12	1.736. 491	Entzerrerplatte kompl. 2-Spur 19/38 cms 50 Hz EQUALIZER PANEL CPLT. 2-TRACK 7,5/15 ips 50 Hz Circuit imprimé de correction cplt. 2-p. 19/38 cms 50 Hz	x	x	x	1	
13	58. 20.0504	Trimm-Potentiometer 500 K, VU - Meterverstärker TRIMM-POTMETER 500 K VU - METER AMPLIFIER Pot. ajustable 500 KΩ pour ampli des VU - mètres	x	x	x	2	7180
14	58. 20.0104	Trimm-Potentiometer 100 K, Uebersprechkomp. TRIMM-POTMETER 100 K, CROSS - TALK COMP. Pot. ajustable 100 KΩ de compensation de diaphonie			x	1	7181

INDEX	Bestellnummer ORDER NUMBER	Beschreibung / PART DESCRIPTION	SERIE			An Qu	IND. III
			I	II	III		
F 15 15	1.736. 686	Löschkopfersatzspule T 856 COIL, DUMMY HEAD LOAD T 856 Bobine de simulation de la tête d'effacement T 856 nachfolgende Pos. be- achten! CHECK SERIAL NUMBER OF RECORDER! Attention aux positions suivantes!	x	x	x	1	7182
	1.736. 687	Löschkopfersatzspule T 856 2-Spur COIL, DUMMY HEAD LOAD T 856 2-TRACK Bobine de simulation de la tête d'effacement T 856 2-p.			x	1	
	1.736. 688	Löschkopfersatzspule T 856 4-Spur COIL, DUMMY HEAD LOAD T 856 4-TRACK Bobine de simulation de la tête d'effacement T 856 4-p. ab Nr. / FROM NO. / Numéros 6901 und höher / UP AND FOR / et suivants sowie für Nr. / AND FOR NO. 60101-60700 63101-68500			x	1	
16	1.736. 684	HF - Filterspule, Aufnahmeverstärker T 855 BIAS REJECTION FILTER, RECORD T 855 Bobine d'arrêt HF T 855 pour amplificateur d'enregis- tirement.	x	x	x	2	7183
17	1.736. 720	HF- Filter, Wiedergabeverstärker T 899, kompl. mit 2 - Spulen (L 3 + L 4) BIAS REJECTION FILTER, PLAYBACK T 899 CPLT. WITH TWO COILS (L 3 + L 4) Bobine d'arrêt HF T 899 pour amplificateur de reproduc- tion (complet avec 2 bobines L 3 + L 4)	x	x	x	1	7184
	1.736. 595-03	Schaltsegment (S 2) Abhörumschalter SWITCH WAFER (S 2) MONITOR SELECTOR Galette du commutateur S 2 (écoute)	x	x	x	1	7185
18	1.736. 400-09	Potentiometer (P 2) 220 K. Abhörverstärker POTENTIOMETER (P 2) 220 K MONITOR VOLUME Potentiomètre 220 KΩ P 2 (puissance amplificateur final)	x	x	x	1	7186
	1.736. 695-04	Raster für Abhörumschalter SWITCH POSITIONER, MONITOR SELECTOR Support cranté du commutateur d'écoute	x	x	x	1	7187
19	1.736. 400-09	Potentiometer (P 1) 220 K. Klangregelung POTENTIOMETER (P 1) 220 K, BASS CONTROL Potentiomètre 220 KΩ P 1 (tonalité)	x	x	x	1	7188
	1.736. 700-01	Schaltsegment (S 3, S 4) Eingangswahlschalter SWITCH WAFER (S 3, S 4) INPUT SELECTOR Galette du commutateur S 3 ou S 4 (entrées)	x	x	x	2	7189
	1.736. 700-02	Raster, Eingangswahlschalter (S 3, S 4) SWITCH POSITIONER, INPUT SELECTOR (S 3, S 4) Support cranté du commutateur d'entrée	x	x	x	2	7190
20	1.736. 400-12	Potentiometer (P 3, P 4) 100 K, Aufnahmeregler POTENTIOMETER (P 3, P 4) 100 K RECORD LEVEL Potentiomètre 100 KΩ P 3 ou P 4 (entrées)	x	x	x	2	7191
08	55. 01.0101	Netzschalter MAINS SWITCH Interrupteur secteur	x	x	x	1	7192

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			I	II	III		
	1.736. 863	Hohlwelle kompl. Netzschalter OUTER SHAFT EXTENSION CPLT. FOR MAINS SWITCH Rallonge tubulaire complète (interrupteur secteur)	x	x	x	1	7205
	1.736. 870	Hohlwelle kompl. Eingangsumschalter Kanal I OUTER SHAFT EXTENSION CPLT. INPUT SELECTOR CH I Rallonge tubulaire complète (commutateur d'entrée canal I)	x	x	x	1	7206
	1.736. 875	Hohlwelle kompl. Eingangsumschalter Kanal II OUTER SHAFT EXTENSION CPLT. INPUT SELECTOR CH II Rallonge tubulaire compl. (commutateur d'entrée canal II)	x	x	x	1	7207
	1.736. 880	Hohlwelle kompl. Verstärkerumschalter OUTER SHAFT EXTENSION CPLT. MONITOR SELECTOR Rallonge tubulaire cplt. (commutateur d'ampli de puissance)	x	x	x	2	7208
	1.736. 400-03	Achsverlängerungen, innere lang IMER SHAFT EXTENSION, LONG Rallonge d'axe interne pour pot. (longue)	x	x	x	3	7209
	1.736. 400-02	Achsverlängerungen, innere kurz IMER SHAFT EXTENSION SHORT Rallonge d'axe interne pour pot. de tonalité (courte)	x	x	x	1	7211
	1.736. 770-02	Lautsprecher AD 3800 M LOUDSPEAKER AD 3800 M Haut - parleur AD 3800 M	x	x	x	1	7193
	1.736. 770	Lautsprecher kompl. mit Schallwand LOUDSPEAKER CPLT. WITH BAFFEE Haut - parleur cplt. avec planchette de fixation	x	x	x	1	
	1.736. 501-04	Unterlagscheibe, Lautspecherwand WASHER, SPEAKER BAFFLE Rondelle de serrage pour dito	x	x	x	4	7194
	20. 21.7206	Z - Blechschaube SELF TAPPING SCREW Vis Parker pour dito	x	x	x	2	7195
	22. 01.8040	Sechskantmutter M 4 HEXAGON NUT M 4 Ecrou 6 - pans M 4 pour dito	x	x	x	2	7196
	20. 21.7305	Z - Blechschaube, Verbindung Ober- und Unterchassis SELF TAPPING SCREW, UPPER TO LOWER CHASSIS Vis Parker de fixation (platine mécanique - chassis électronique)	x	x	x	4	7197
	22. 16.2001	Blechmutter (Speed Nut) für Verbindungsschraube SPEED NUT FOR ABOVE Cavalier de serrage pour dito (Speed Nut)	x	x	x	4	7198

G



01	54. 02.0293	Doppel - Cinchbuchse DOUBLE PHONO SOCKET Prise Cinch double	x	x	x	5	7199
02	53. 01.0111	7 pol. Röhrenfassung (Fernsteuerung) REMOTE CONTROL SOCKET Prise de commande à distance (socle Heptal)	x	x	x	1	7200

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			I	II	III		
G	03	58. 11.6473 Potentiometer 47 K für Diodeneingang POTENTIOMETER 47 K FOR DIODE INPUT Potentiomètre 47 KΩ (entrée diode)	x	x	x	2	7201
	04	53. 03.0121 Netzspannungswähler MAINS VOLTAGE SELECTOR Sélecteur de tension secteur	x	x	x	1	7202
	05	53. 03.0120 Spannungswählerknopf VOLTAGE SELECTOR KNOB Bouchon porte - fusible (sélecteur de tension)	x	x	x	1	7203
		51. 01.0115 Sicherung 0,63 A / 220 V FUSE 0,63 A / 220 V Fusible 0,63 A / 220 V	x	x	x	1	7204
		51. 01.0118 Sicherung 1,25 A / 110 V FUSE 1,25 A / 110 V Fusible 1,25 A / 110 V	x	x	x	1	
	06	1.736. 400-10 Fernbedienungs - Blindstecker REMOTE CONTROL, DUMMY PLUG Bouchon de court - circuit (commande à distance)	x	x	x	1	7211
	07	54. 01.0113 Anschlussbuchse für Lautsprecher (mit Schalter) LONDSPEAKER SOCKET (WITH SWITCH) Prise de haut - parleur (avec interrupteur)	x	x	x	1	
		Werkzeuge und Servicehilfen TOOLS AND SERVICE - AIDS Outillage et accessoires					
		Bezugsband mit 4 Spur Justierteil nach IEC - Empfehlung CALIBRATION TAPE (FULL TRACK RECORDING) PER IEC RECOMMANDATION - WITH 4 TRACK ALIGNMENT SECTION Bande de mesure avec plage d'ajustement 4 pistes selon recommandations IEC	x	x	x		
		Doppelschraubenzieher 337 - R DOUBLE SCREW DRIVE 337 - R Tournevis double d'alignement 337 - R	x	x	x		
		Federwaage 0,5 kg SPRING SCALE 0,5 KG Peson 0,5 kg	x	x	x		
		Federwaage 5,0 kg SPRING SCALE 5,0 KG Peson 5,0 kg	x	x	x		
		Stechschlüssel spez. für Capstanaggregat 8 mm NUT DRIVER 8 MM SPEC. FOR CAPSTAN ASSEMBLY Clé à tube spéc. pour agrégat de cabestan 8 mm	x				
		Kopfmagnetisierungsspule 220 V HEAD DEMAGNETIZER 220 V Démagnétiseur de têtes 220 V	x	x	x		

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