

## Up-date to the service manual Studer A816

---

---

### UP-DATE Tape Deck Section 6

---

Main Transformer 300VA .....	1.816.520.81
Stabilizer .....	1.811.790.81
MP-Unit TD Control .....	1.816.785.24
Capstan Motor Drive Amplifier PCB .....	1.820.774.27
Tacho Sensor Electronics .....	1.021.695.86

### UP-DATE Master Section 7

---

MP Unit Master .....	1.816.786.24
----------------------	--------------

### UP-DATE

---

Bandabhebeaggregat, Andruckmechanik .....	Seite 9/13
9.6 Andruckaggregat .....	Seite 9/14

### UP-DATE Zubehör Section 10

---

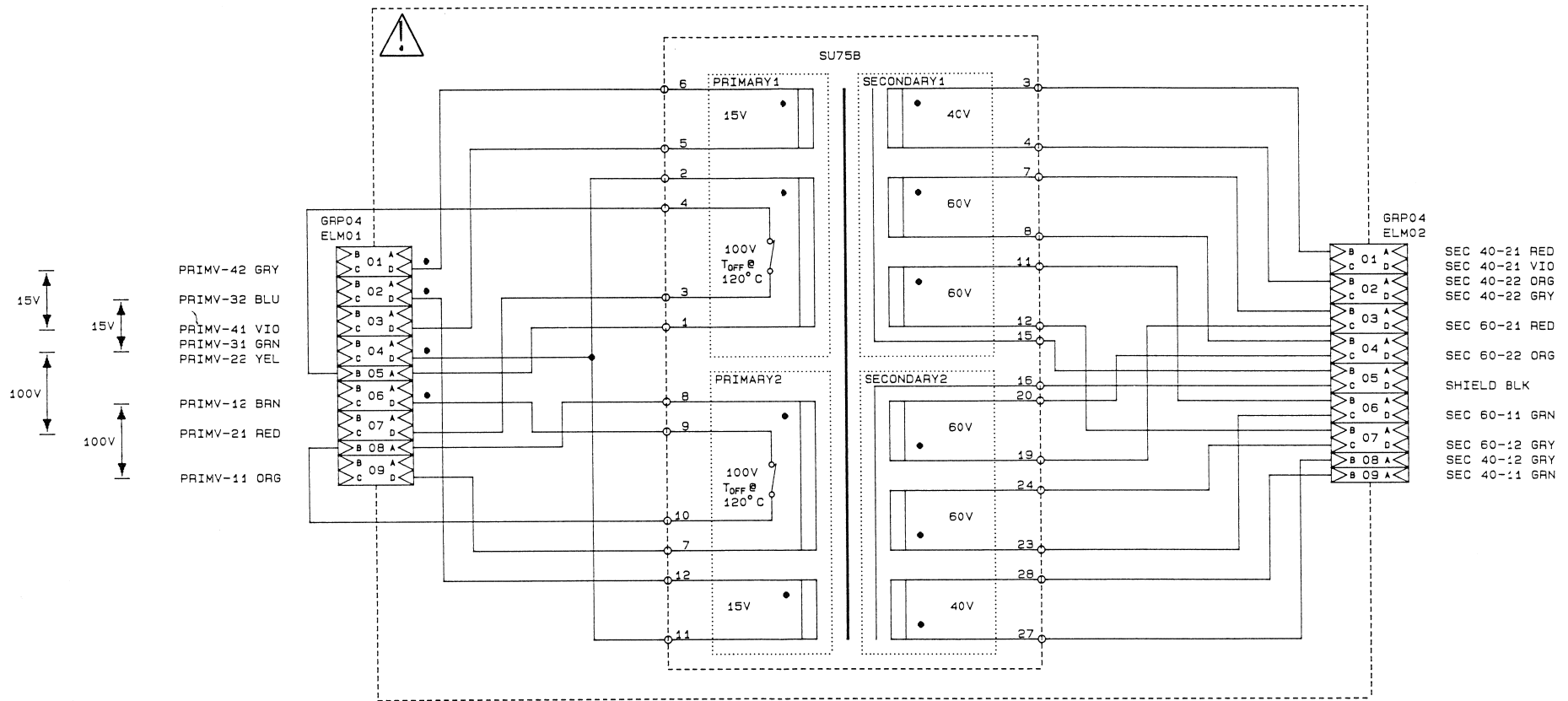
Tape Deck Remote Control Cabinet (Parallel) .....	1.328.250.81
- Tape Deck Remote Control PCB .....	1.328.251.81
Tape Deck Remote Control Module (Parallel) .....	1.328.255.81
- Connector PCB .....	1.328.257.81
Remote Timer/Lap Mode Display .....	1.328.270.00
- Stabilizer PCB .....	1.328.213.81
Remote Control Cabinet (Serial) .....	1.328.210.81
Remote Control Module (Serial) .....	1.328.220.81
- Stabilizer PCB .....	1.328.213.81
- Remote Control Driver PCB .....	1.328.211.25
Autolocator Module .....	1.328.230.82
Autolocator Cabinet .....	1.328.240.82
- Stabilizer Board .....	1.328.213.81

Prepared and edited by:  
STUDER Professional Audio AG  
Technical Documentation  
Althardstrasse 30  
CH-8105 Regensdorf - Switzerland  
STUDER is a registered trade mark of STUDER Professional Audio AG, Regensdorf

Copyright by STUDER Professional Audio AG  
Printed in Switzerland  
Order no. 10.27.3820 (Ed. 0895)

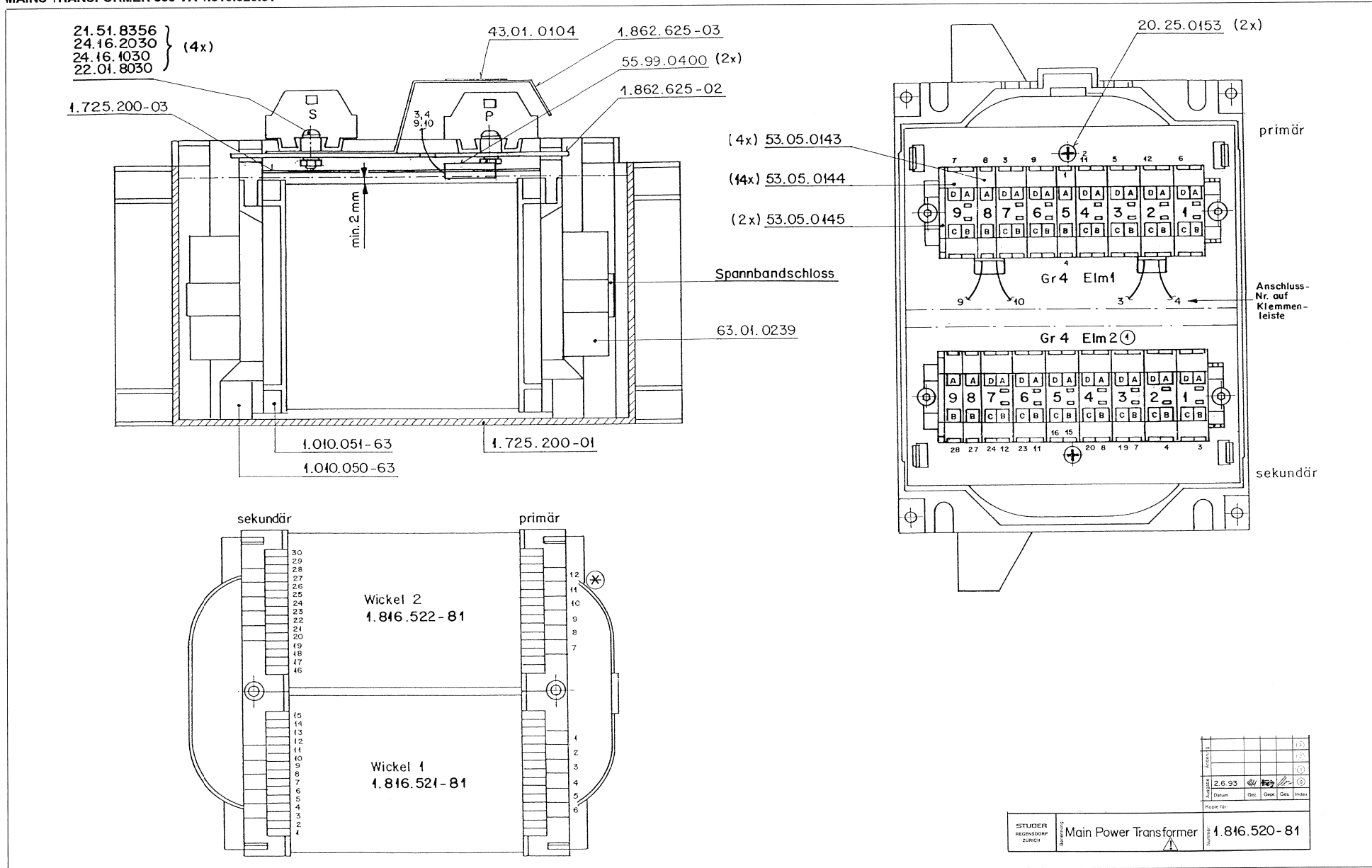
We reserve the right to make alterations

MAINS TRANSFORMER 300 VA 1.816.520.81

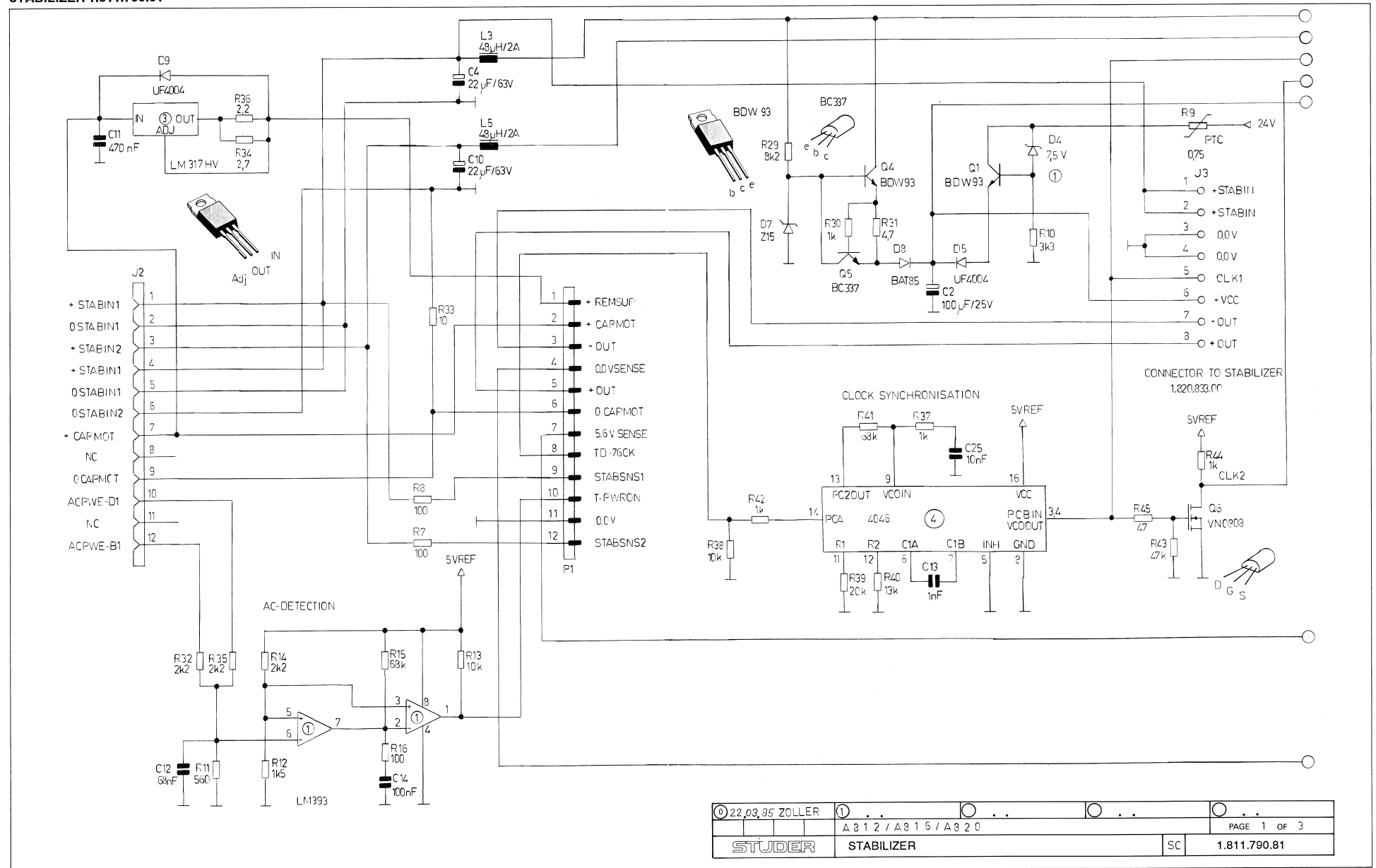


24.08.93	CHB				
A 816			PAGE 1 OF 1		
STUDER		MAIN TRANSFORMER 300 VA		SC	1.816.520.81

MAINS TRANSFORMER 300 VA 1.816.520.81



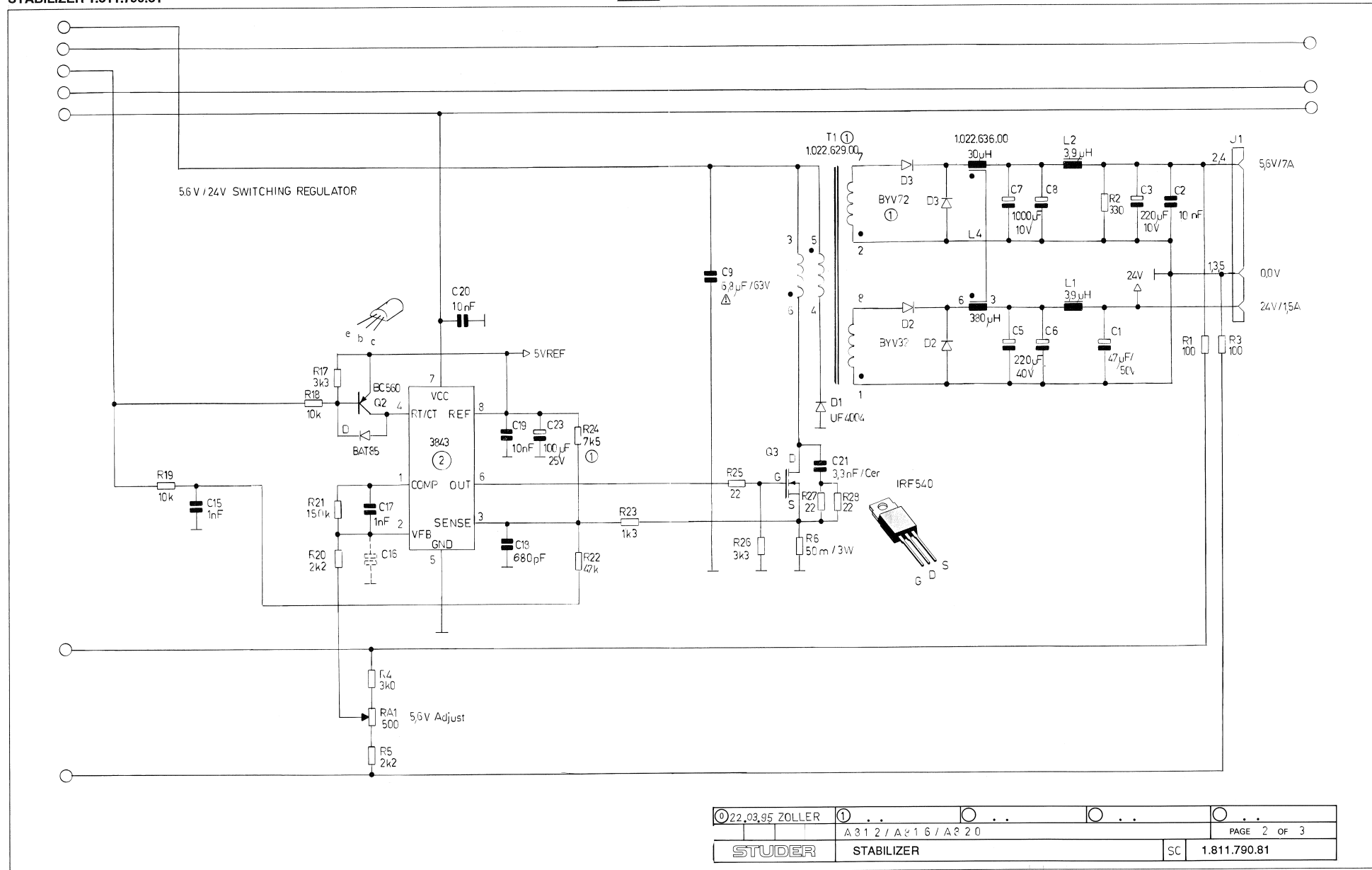
STABILIZER 1.811.790.81



© 22.03.95 ZOLLER	① . . . . .	. . . . .	. . . . .	. . . . .
A 8 1 2 / A 8 1 6 / A 8 2 0			PAGE 1 OF 3	
STUDER		STABILIZER		SC 1.811.790.81



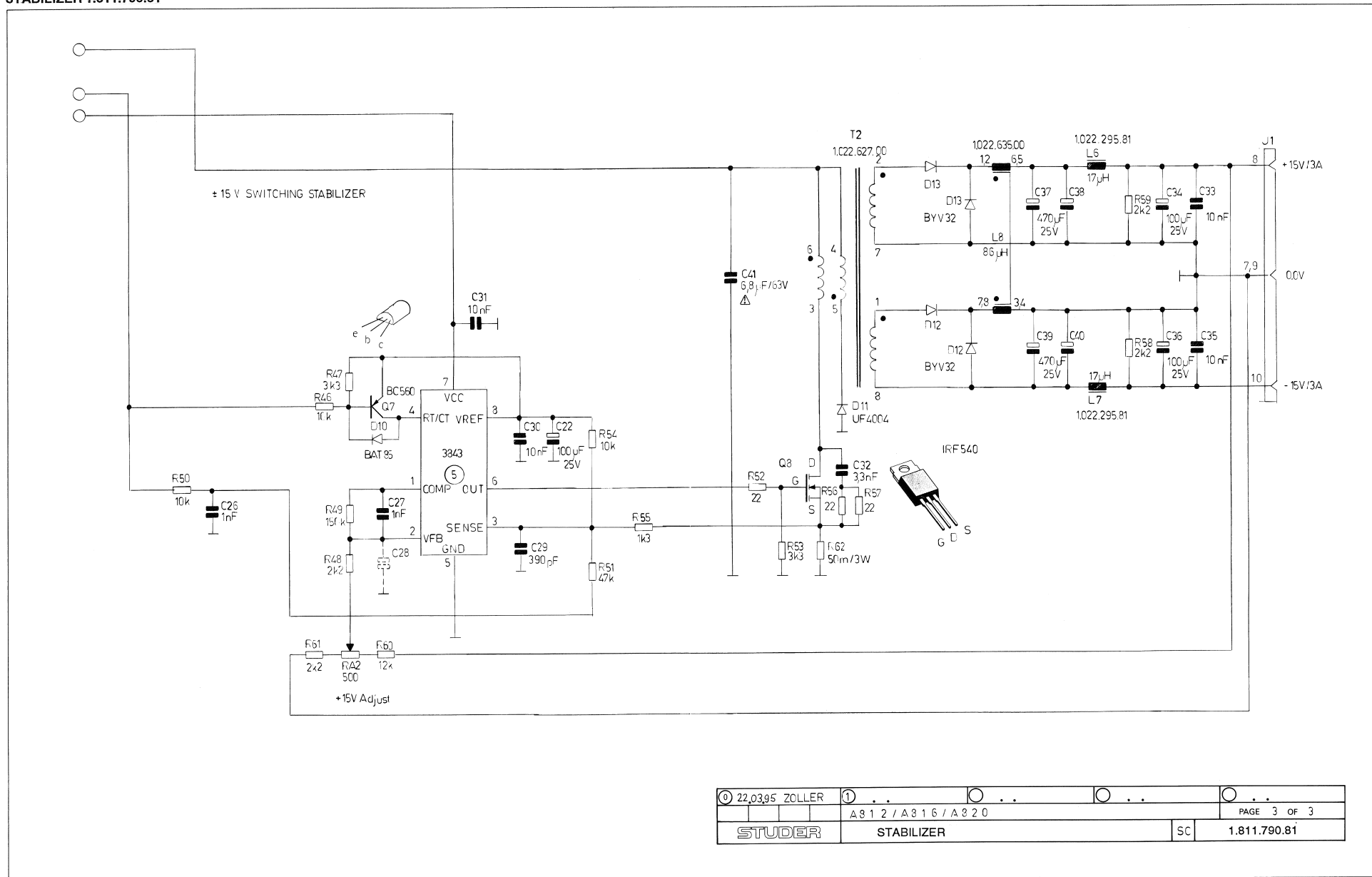
STABILIZER 1.811.790.81



© 22.03.95 ZOLLER	① . . . . .	○ . . . . .	○ . . . . .	○ . . . . .
	A 3 1 2 / A 2 1 6 / A 2 0			PAGE 2 OF 3
STUDER	STABILIZER	SC	1.811.790.81	

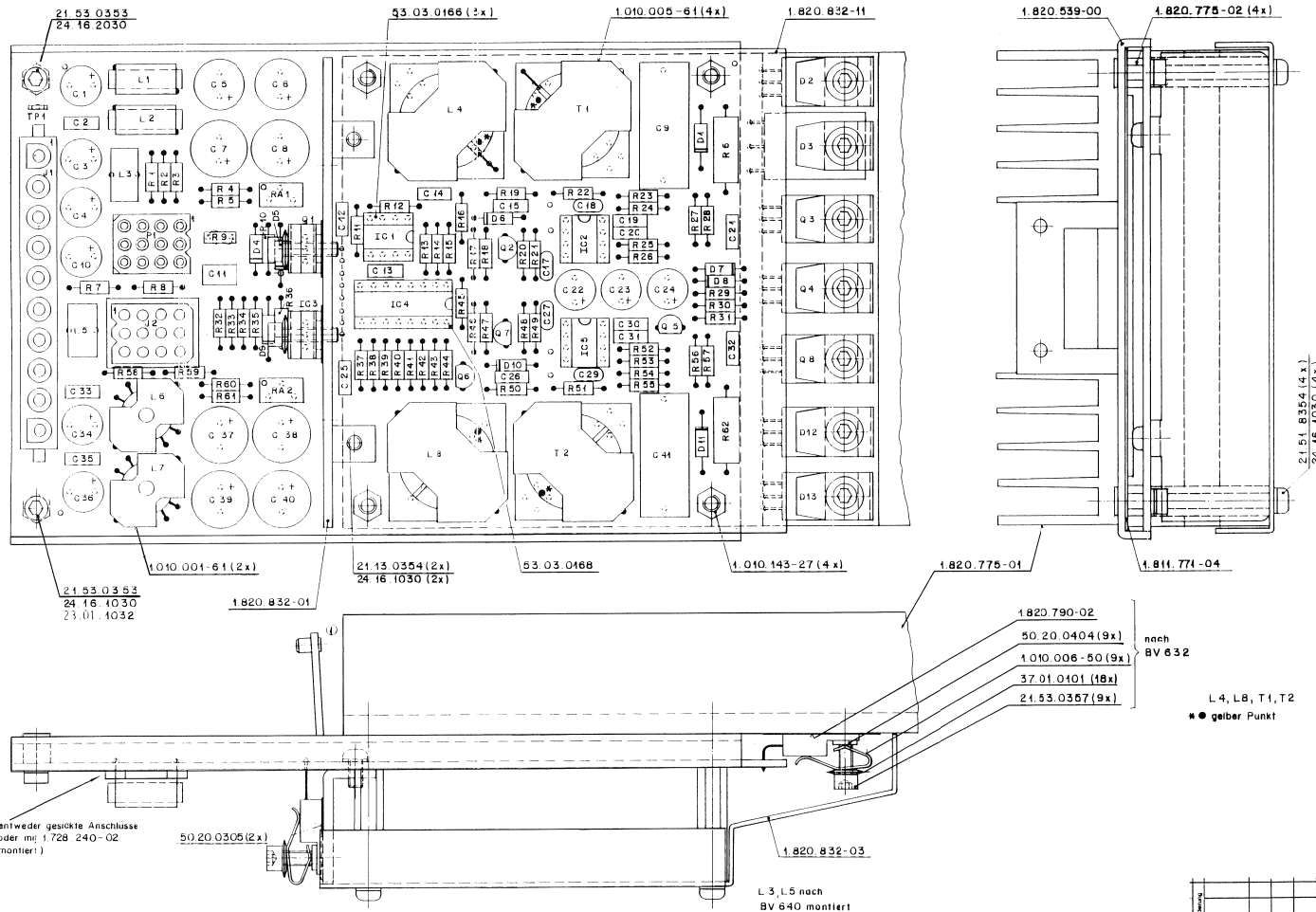


STABILIZER 1.811.790.81



22.03.95 ZOLLER	1				
A812 / A816 / A820			PAGE 3 OF 3		
STUDER	STABILIZER		SC	1.811.790.81	

STABILIZER 1.811.790.81



Ad . . . POS. . . REF.No. . . DESCRIPTION . . . MANUFACTURER

C....1	59.22.6470	47 uF	-20%, 40V	EL	
C....2	59.06.0103	10 nF	10%, 63V	PETP	
C....3	59.22.3221	220 uF	-20%, 10V	EL	
C....4	59.22.8220	22 uF	-20%, 63V	EL	
C....5	59.22.8221	220 uF	-20%, 40V	EL	
C....6	59.22.6221	220 uF	-20%, 40V	EL	
C....7	59.22.3102	1000 uF	-20%, 10V	EL	
C....8	59.22.3102	1000 uF	-20%, 10V	EL	
C....9	59.02.0685	6.8 uF	10%, 63V	MPC, /1/	
C....10	59.22.8220	22 uF	-20%, 63V	EL	
C....11	59.06.0474	470 nF	10%, 63V	PETP	
C....12	59.06.0683	68 nF	10%, 63V	PETP	
C....13	59.06.5102	1 nF	5%, 63V	PETP	
C....14	59.06.5104	100 nF	5%, 63V	PETP	
C....15	59.06.5102	1 nF	5%, 63V	PETP	
C....16	00.00.0000			not used	
C....17	59.32.4102	1 nF	20%, 63V	CER	
C....18	59.32.1681	680 pF	10%, 400V	CER	
C....19	59.06.0103	10 nF	10%, 63V	PETP	
C....20	59.06.0103	10 nF	10%, 63V	PETP	
C....21	59.06.0332	3.3 nF	10%, 63V	PETP	
C....22	59.22.5101	100 uF	-20%, 25V	EL	
C....23	59.22.5101	100 uF	-20%, 25V	EL	
C....24	59.22.5101	100 uF	-20%, 25V	EL	
C....25	59.06.0103	10 nF	10%, 63V	PETP	
C....26	59.06.5102	1 nF	5%, 63V	PETP	
C....27	59.32.4102	1 nF	20%, 63V	CER	
C....28	00.00.0000			not used	
C....29	59.34.5391	390 pF	5%, 63V	CER	
C....30	59.06.0103	10 nF	10%, 63V	PETP	
C....31	59.06.0103	10 nF	10%, 63V	PETP	
C....32	59.06.0332	3.3 nF	10%, 63V	PETP	
C....33	59.06.0103	10 nF	10%, 63V	PETP	
C....34	59.22.5101	100 uF	-20%, 25V	EL	
C....35	59.06.0103	10 nF	10%, 63V	PETP	
C....36	59.22.5101	100 uF	-20%, 25V	EL	
C....37	59.22.5471	470 uF	-20%, 25V	EL	
C....38	59.22.5471	470 uF	-20%, 25V	EL	
C....39	59.22.5471	470 uF	-20%, 25V	EL	
C....40	59.22.5471	470 uF	-20%, 25V	EL	
C....41	59.02.0685	6.8 uF	10%, 63V	MPC, /1/	
D....1	50.04.0138	UF 4004	BYT 01-400, UES 1106	GI,Tho,Un	
D....2	50.04.0517	BV 32		Mot,Ph	
D....3	50.04.0522	BV 72	BW 99 P - 100	ITT,Mot,Ph,Tf,SS,Tho	
D....4	50.04.1103	Z 7,5 V		Ph,SS,Tho	
D....5	50.04.0616	UF 4004	BYT 01-400, UES 1106	GI,Tho,Un	
D....6	50.04.0127	BAT 85		Ph,SS,Tho	
D....7	50.04.1139	Z 15 V		ITT,Mot,Ph,Tf,SS,Tho	
D....8	50.04.0127	BAT 85		Ph,SS,Tho	
D....9	50.04.0138	UF 4004	BYT 01-400, UES 1106	GI,Tho,Un	
D....10	50.04.0127	BAT 85		Ph,SS,Tho	
D....11	50.04.0138	UF 4004	BYT 01-400, UES 1106	GI,Tho,Un	
D....12	50.04.0517	BV 32		Mot,Ph	
D....13	50.04.0517	BV 32		Mot,Ph	
IC....1	50.05.0283	LM 393 N	LM 393 P, LM 393 DP	Sig,TI,NS,Tho	
IC....2	50.10.0113	IP3843 N	UC 3843 N	IP5,Un	
IC....3	50.10.0116	LM31HVT		Seagate,SG	
IC....4	50.07.0046	CD4046BE	HCF 4046 BE	SGS,RCA	
IC....5	50.10.0113	IP3843 N	UC 3843 N	IP5,Un	
J....1	54.25.0010			see note 1	
J....2	54.02.0409			see note 2	
L....1	62.99.0111	3.9 uH		Vo	
L....2	62.99.0111	3.9 uH		Vo	
L....3	62.03.0010	48 uH		TokIn	
L....4	1.022.636.00	30 uH		St	
L....5	62.03.0010	48 uH		TokIn	
L....6	1.022.295.81	17 uH		St	
L....7	1.022.295.81	17 uH		St	
L....8	1.022.635.00	86 uH		St	
P....1	54.02.0408			see note 3	
Q....1	50.03.0512	BDW 93 B	BD 899 A	Mot,SGS,Tho	
Q....2	50.03.0496	BC 560		Sie	
Q....3	50.03.1609	IRF 540		IR	
Q....4	50.03.0512	BDW 93 B	BD 899 A	Mot,SGS,Tho	
Q....5	50.03.0340	BC 337-25		ITT,NS,Ph,Sie	
Q....6	50.03.1505	VN 0808 M	ZVN 0108 A	Fe,Six	
Q....7	50.03.0496	BC 560		Sie	
Q....8	50.03.1609	IRF 540		IR	
R....1	57.11.3101	100 Ohm	5%		
R....2	57.11.3331	330 Ohm	5%		
R....3	57.11.3101	100 Ohm	5%		
R....4	57.11.3302	3.0 kOhm	5%		
R....5	57.11.3222	2.2 kOhm	5%		
R....6	57.56.2050	50 mOhm	3%, 3W		
R....7	57.19.0101	100 Ohm	5%, Fuse		
R....8	57.19.0101	100 Ohm	5%, Fuse		
R....9	57.92.7013	0.75 Ohm	PTC		
R....10	57.11.3332	3.3 kOhm	5%		
R....11	57.11.3561	560 Ohm	1%		
R....12	57.11.3152	1.5 kOhm	1%		
R....13	57.11.3103	10 kOhm	5%		
R....14	57.11.3222	2.2 kOhm	1%		
R....15	57.11.3683	68 kOhm	1%		

STUDER  
TEGENDORF  
ZÜRICH

STABILIZER  
1.811.790.81

Abteilung	Abzeichen	1	2	3
22.395	PZ	1	1	1
Datum	Gez	Uepr	Uepr	Uepr
Kopie Nr.				



STABILIZER 1.811.790.81

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
R....16	57.11.3101	100 Ohm	1%	
R....17	57.11.3332	3.3 kOhm	5%	
R....18	57.11.3103	10 kOhm	5%	
R....19	57.11.3103	10 kOhm	1%	
R....20	57.11.3222	2.2 kOhm	5%	
R....21	57.11.3154	150 kOhm	5%	
R....22	57.11.3473	47 kOhm	1%	
R....23	57.11.3132	1.3 kOhm	1%	
R....24	57.11.3752	7.5 kOhm	1%	
R....25	57.11.3220	22 Ohm	5%	
R....26	57.11.3332	3.3 kOhm	5%	
R....27	57.11.3220	22 Ohm	5%	
R....28	57.11.3220	22 Ohm	5%	
R....29	57.11.3822	8.2 kOhm	5%	
R....30	57.11.3102	1 kOhm	5%	
R....31	57.11.3479	4.7 Ohm	5%	
R....32	57.11.3222	2.2 kOhm	1%	
R....33	57.11.3100	10 Ohm	5%	
R....34	57.11.3279	2.7 Ohm	5%	
R....35	57.11.3222	2.2 kOhm	1%	
R....36	57.11.3229	2.2 Ohm	5%	
R....37	57.11.3102	1 kOhm	1%	
R....38	57.11.3103	10 kOhm	5%	
R....39	57.11.3203	20 kOhm	1%	
R....40	57.11.3133	13 kOhm	1%	
R....41	57.11.3683	68 kOhm	5%	
R....42	57.11.3102	1 kOhm	5%	
R....43	57.11.3473	47 kOhm	5%	
R....44	57.11.3102	1 kOhm	5%	
R....45	57.11.3470	47 Ohm	5%	
R....46	57.11.3103	10 kOhm	5%	
R....47	57.11.3332	3.3 kOhm	5%	
R....48	57.11.3222	2.2 kOhm	5%	
R....49	57.11.3154	150 kOhm	5%	
R....50	57.11.3103	10 kOhm	1%	
R....51	57.11.3473	47 kOhm	1%	
R....52	57.11.3220	22 Ohm	5%	
R....53	57.11.3332	3.3 kOhm	5%	
R....54	57.11.3103	10 kOhm	1%	
R....55	57.11.3132	1.3 kOhm	1%	
R....56	57.11.3220	22 Ohm	5%	
R....57	57.11.3220	22 Ohm	5%	
R....58	57.11.3222	2.2 kOhm	5%	
R....59	57.11.3222	2.2 kOhm	5%	
R....60	57.11.3123	12 kOhm	5%	
R....61	57.11.3222	2.2 kOhm	5%	
R....62	57.56.2050	50 mOhm	3%, 3W	
RA....1	58.05.1501	500 Ohm	10%, multi turn	
RA....2	58.05.1501	500 Ohm	10%, multi turn	
T....1	1.022.629.00		Switching Transformer	St
T....2	1.022.627.00		Switching Transformer	St
TP....1	54.02.0320		Test Point	

/!\ = Increasing of safety relative to risk of fire.

Note 1 - Connector:  
10 contacts, AMP Nr. 826 852-3

Note 2 - Connector:  
case, Studer Nr. 54.02.0409  
Molex Nr. 03-06-1121  
12 contacts, Studer Nr. 54.02.0407  
Molex Nr. 02-06-7103

Note 3 - Connector:  
case, Studer Nr. 54.02.0408  
Molex Nr. 03-06-2121  
12 contacts, Studer Nr. 54.02.0406  
Molex Nr. 02-06-8103

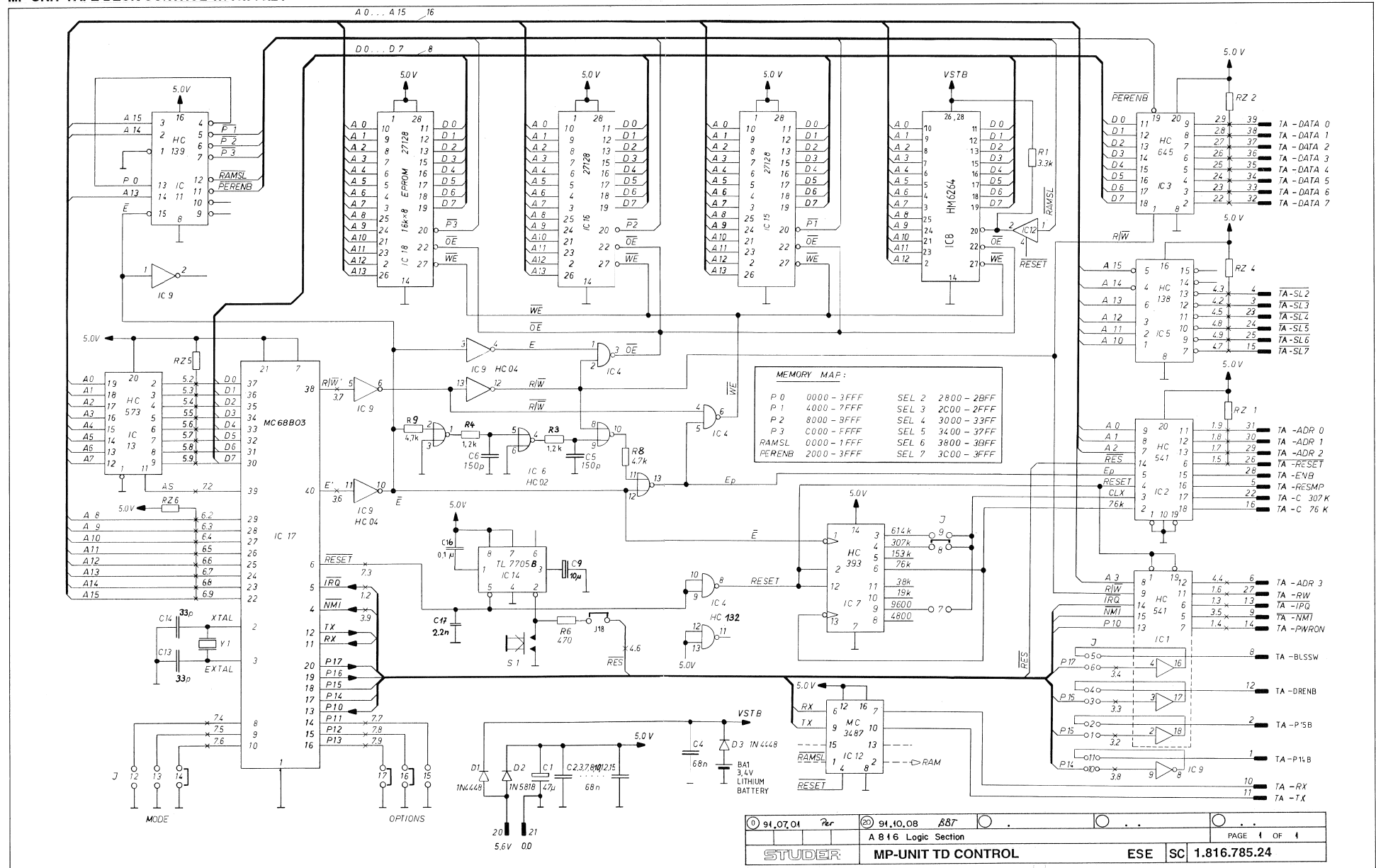
Ce=Ceramic, El=Electrolytic, MPETP=Metallized Polyesterfilm, PETP=Polyesterfilm, MPC=Metallized Polycarbonate film.

MANUFACTURER: Fe=Ferranti, GI=General Instruments, IPS=Integrated Power Semiconductor, ITT=Intermetall, IR=International Rectifier, Mot=Motorola, NS=National Semiconductors, Ph=Philips, RCA=RCA Corporation, Ses=Sesocsem, SGS=SGS/Ates, SG=Silicon General, Sie=Siemens, Sig=Signetics, Six=Siliconix, St=Studer, Tf=Telefunken, Tho=Thomson, Ti=Texas Instruments, Un=Unitrode, Vo=Vogt & Co.

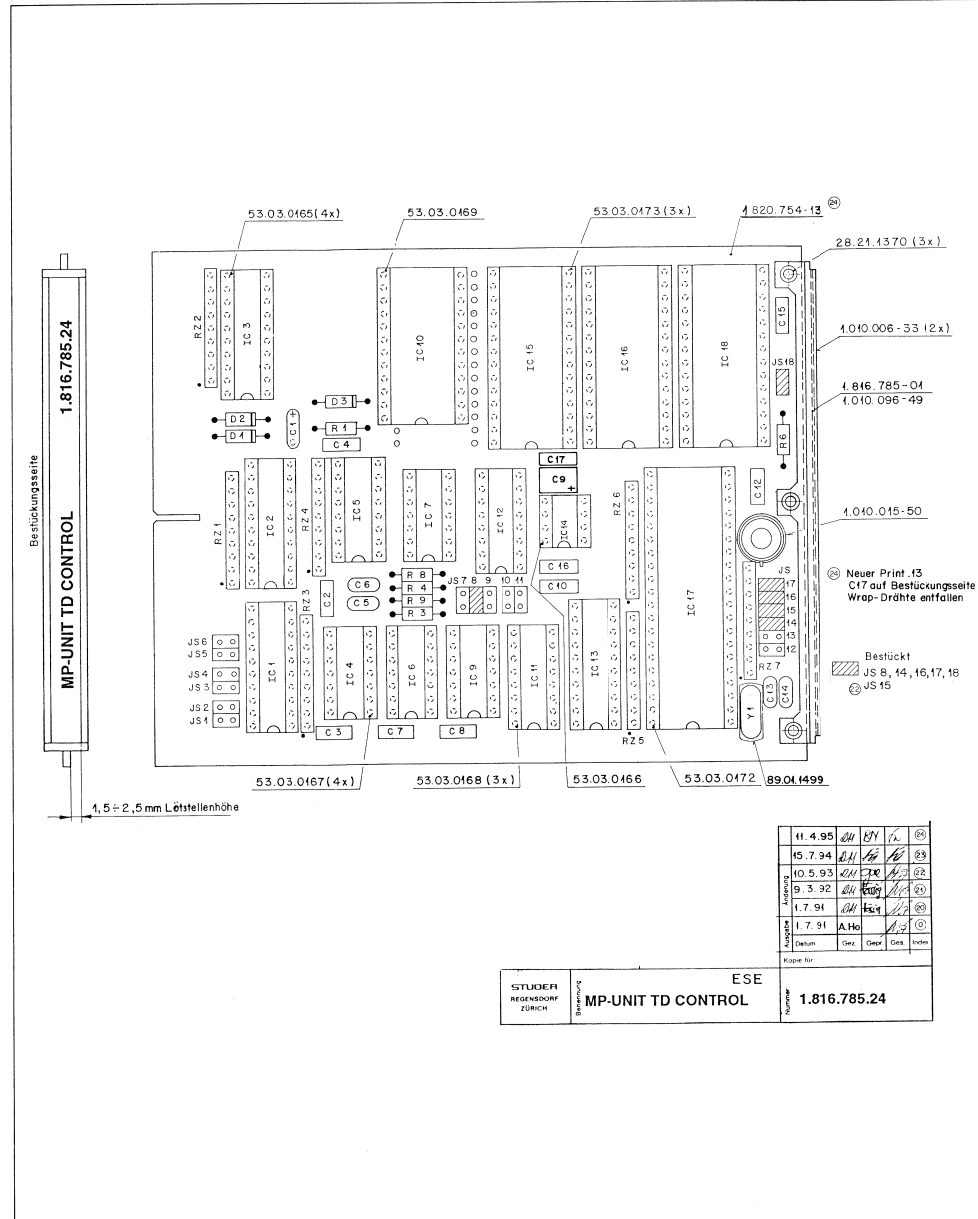
1.811.790.81 STABILIZER GP 95/03/2200



MP-UNIT TAPE DECK CONTROL 1.816.785.24

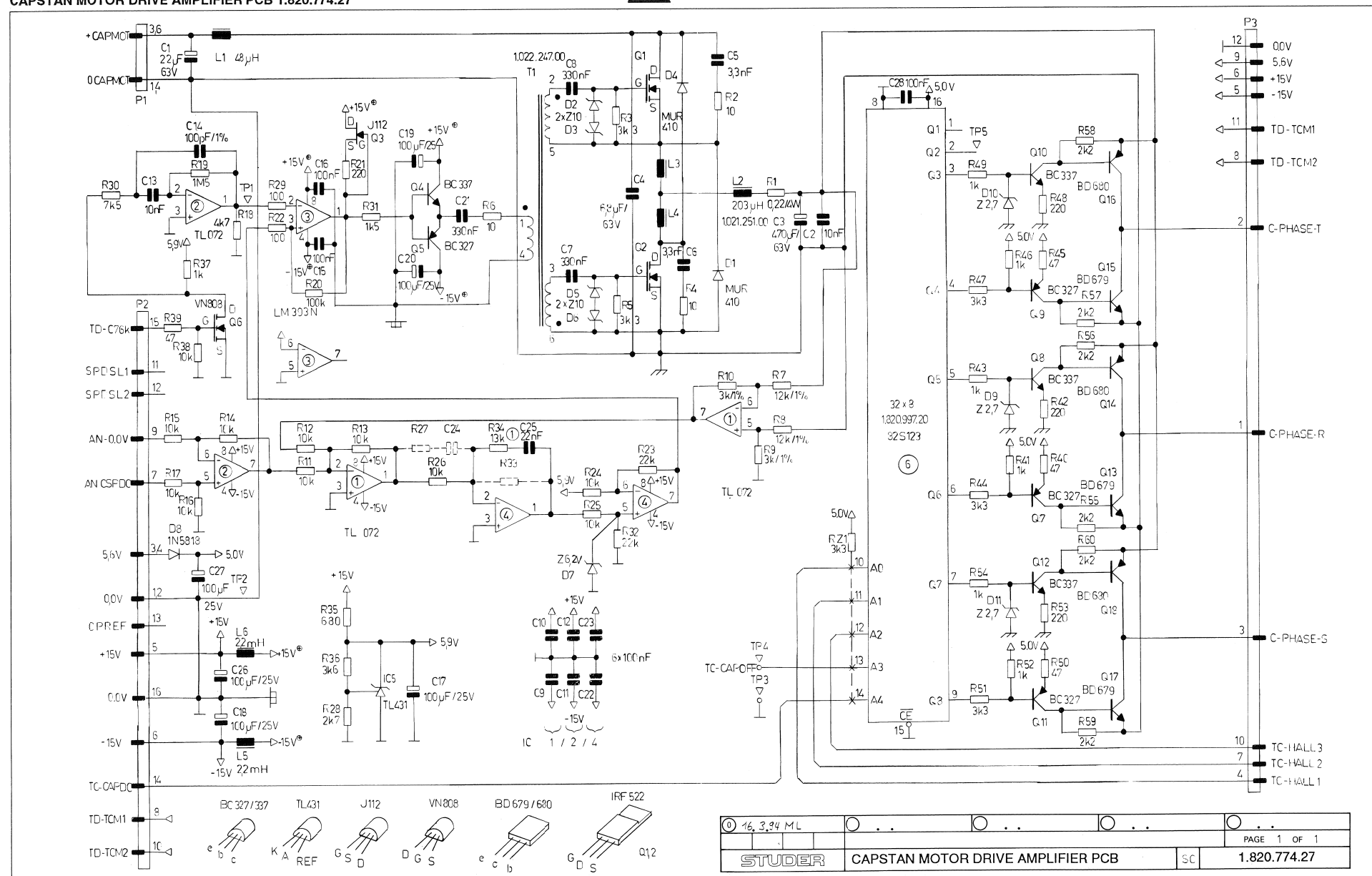


MP-UNIT TAPE DECK CONTROL 1.816.785.24



Ad	..POS.	..REF.No.	DESCRIPTION	MANUFACTURER
C....1	59.26.0470	47 uF	20%, 6.3V, Sal	Ph
C....2	59.06.0683	68 nF	10%, 63V, PETP	
C....3	59.06.0683	68 nF	10%, 63V, PETP	
C....4	59.06.0683	68 nF	10%, 63V, PETP	
C....5	59.34.7151	150 pF	2%, Ce	
C....6	59.34.7151	150 pF	2%, Ce	
C....7	59.06.0683	68 nF	10%, 63V, PETP	
C....8	59.06.0683	68 nF	10%, 63V, PETP	
C....9	59.26.2100	10 uF	20%, 16V, Sal	
C....10	59.06.0683	68 nF	10%, 63V, PETP	
C....11	00.00.0000	not used		
C....12	59.06.0683	68 nF	10%, 63V, PETP	
C....13	59.34.2330	33 pF	5%, Ce	
C....14	59.34.2330	33 pF	5%, Ce	
C....15	59.06.0683	68 nF	10%, 63V, PETP	
C....16	59.06.0683	68 nF	10%, 63V, PETP	
C....17	59.06.0104	100 nF	10%, 63V, PETP	
C....18	59.06.0222	2.2 nF	10%, 63V, PETP	
D....1	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
D....2	50.04.0512	1N 5818		Fc,ITT,Ph,Ses,Tf
D....3	50.04.0125	1N 4448		
IC....1	50.17.1541	74 HC 541		Not,NS,Ph,RCA,SGS,TI,To
IC....2	50.17.1621	74 HC 541		Not,NS,Ph,RCA,SGS,TI,To
IC....3	50.17.1645	74 HC 645		Not,NS,Ph,RCA,SGS,TI,To
IC....4	50.17.1132	74 HC 132		Not,NS,Ph,RCA,SGS,TI,To
IC....5	50.17.1138	74 HC 138		Not,NS,Ph,RCA,SGS,TI,To
IC....6	50.17.1002	74 HC 02		Not,NS,Ph,RCA,SGS,TI,To
IC....7	50.17.1393	74 HC 393		Not,NS,Ph,RCA,SGS,TI,To
IC....8	00.00.0000	not used		
IC....9	50.17.0004	74 NCT 04		Not,NS,Ph,RCA,SGS,TI,To
IC....10	50.14.0107	HM6116P-4		MSM 5128-15
IC....11	50.17.1139	74 HC 139		Not,NS,Ph,RCA,SGS,TI,To
IC....12	50.15.0105	MC 3487 P		DS 3487 N
IC....13	50.17.1573	74 HC 573		Not,NS,Ph,RCA,SGS,TI,To
IC....14	50.11.0157	TL77058CP		TI
IC....15	00.00.0000	not used		
IC....16	50.14.0125	27128		HN 4827128G-30
IC....17	1.816.995.20	27128		Software 45/91, see note 1
IC....18	1.816.995.21	27128		Software 10/92, see note 1
IC....19	1.816.995.22	27128		Software 18/93, see note 1
IC....20	1.816.995.23	27128		Software 28/94, see note 1
IC....21	50.16.0107	MC6803P-1		6803P-1
IC....22	50.14.0125	27128		HN 4827128G-30
IC....23	1.816.995.20	27128		Software 45/91, see note 1
IC....24	1.816.995.21	27128		Software 10/92, see note 1
IC....25	1.816.995.22	27128		Software 18/93, see note 1
IC....26	1.816.995.23	27128		Software 28/94, see note 1
JS....1				see note 2
JS....2				see note 2
JS....3				see note 2
JS....4				see note 2
JS....5				see note 2
JS....6				see note 2
JS....7				see note 2
JS....8				see note 2
JS....9				see note 2
JS....10				see note 2
JS....11				see note 2
JS....12				see note 2
JS....13				see note 2
JS....14				see note 2
JS....15				see note 2
JS....16				see note 2
JS....17				see note 2
JS....18				see note 2
F....1	57.11.3332	3.3 kOhm	5k	
F....2	00.00.0000	not used		
F....3	57.11.3122	1.2 kOhm	5k	
F....4	57.11.3122	1.2 kOhm	5k	
F....5	00.00.0000	not used		
F....6	57.11.3471	470 Ohm	5k	
F....7	00.00.0000	not used		
F....8	57.11.3472	4.7 kOhm	5k	
F....9	57.11.3472	4.7 kOhm	5k	
RZ....1	57.88.4332			see note 3
RZ....2	57.88.4332			see note 3
RZ....3	57.88.4332			see note 3
RZ....4	57.88.4332			see note 3
RZ....5	57.88.4332			see note 3
RZ....6	57.88.4332			see note 3
RZ....7	57.88.4332			see note 3
S....1	55.03.0122			Chicago Switch 34-550-001
Y....1	89.01.0560			4.9152 Mhz, +100 ppm

CAPSTAN MOTOR DRIVE AMPLIFIER PCB 1.820.774.27





CAPSTAN MOTOR DRIVE AMPLIFIER PCB 1.820.774.27

**Ansicht A - A**

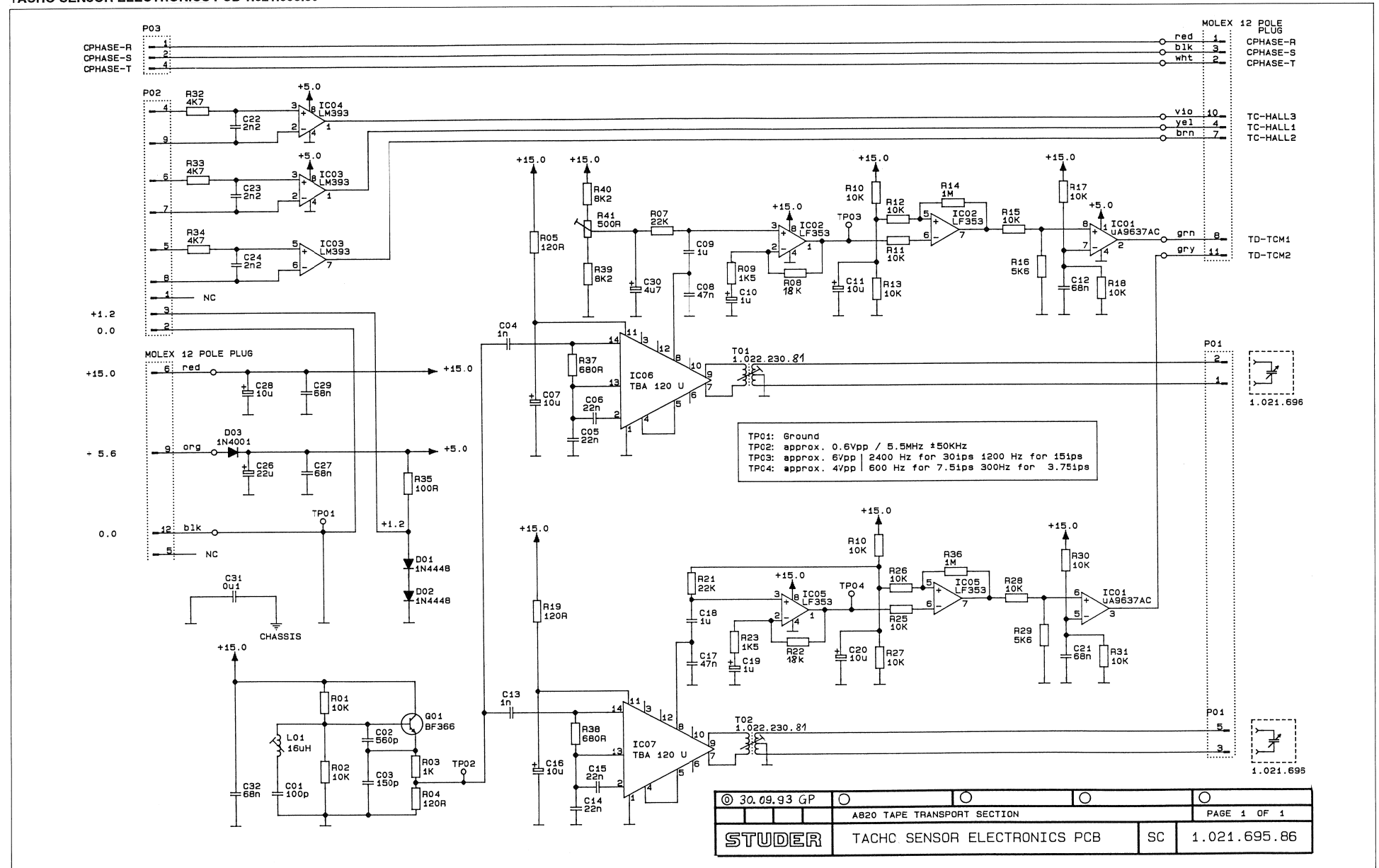
Ad	.POS.	REF.No.	DESCRIPTION	MANUFACTURER
C....1	59.22.8220	22 uF	-20%, 63V, EL	
C....2	59.06.0103	10 nF	10%, 63V, PETP	
C....3	59.25.6471	470 uF	-20%, 63V, EL	
C....4	59.02.0685	6.8 uF	5%, 63V, MPC	
C....5	59.06.0332	3.3 nF	10%, 63V, PETP	
C....6	59.06.0332	3.3 nF	10%, 63V, PETP	
C....7	59.06.0334	330 nF	10%, 63V, PETP	
C....8	59.06.0334	330 nF	10%, 63V, PETP	
C....9	59.06.0104	100 nF	10%, 63V, PETP	
C....10	59.06.0104	100 nF	10%, 63V, PETP	
C....11	59.06.0104	100 nF	10%, 63V, PETP	
C....12	59.06.0104	100 nF	10%, 63V, PETP	
C....13	59.06.0103	10 nF	10%, 63V, PETP	
C....14	59.05.1101	100 pF	1%, 63V, PP	
C....15	59.06.0104	100 nF	10%, 63V, PETP	
C....16	59.06.0104	100 nF	10%, 63V, PETP	
C....17	59.22.5101	100 uF	-20%, 25V, EL	
C....18	59.22.5101	100 uF	-20%, 25V, EL	
C....19	59.22.5101	100 uF	-20%, 25V, EL	
C....20	59.22.5101	100 uF	-20%, 25V, EL	
C....21	59.06.0334	330 nF	10%, 63V, PETP	
C....22	59.06.0104	100 nF	10%, 63V, PETP	
C....23	59.06.0104	100 nF	10%, 63V, PETP	
C....24	00.00.0000	not used		
C....25	59.06.0223	22 nF	10%, 63V, PETP	
C....26	59.22.5101	100 uF	-20%, 25V, EL	
C....27	59.22.5101	100 uF	-20%, 25V, EL	
C....28	59.06.0104	100 nF	10%, 63V, PETP	
D....1	50.04.0521	MUR 410		Mot, G1
D....2	50.04.1216	Z 10 V	5%, 1.3W	ITT, Mot, Ph, T, F, SGS
D....3	50.04.1216	Z 10 V	5%, 1.3W	ITT, Mot, Ph, T, F, SGS
D....4	50.04.0521	MUR 410		Mot, G1
D....5	50.04.1216	Z 10 V	5%, 1.3W	ITT, Mot, Ph, T, F, SGS
D....6	50.04.1216	Z 10 V	5%, 1.3W	ITT, Mot, Ph, T, F, SGS
D....7	50.04.0312	1N 5819	5%, 40W	ITT, Mot, Ph, T, F, SGS
D....8	50.04.1106	Z 2.7 V	5%, 40W	ITT, Mot, Ph, T, F, SGS
D....9	50.04.1106	Z 2.7 V	5%, 40W	ITT, Mot, Ph, T, F, SGS
D....10	50.04.1106	Z 2.7 V	5%, 40W	ITT, Mot, Ph, T, F, SGS
D....11	50.04.1106	Z 2.7 V	5%, 40W	ITT, Mot, Ph, T, F, SGS
IC....1	50.09.0101	TL 072 CP		Mot, Ti, NS
IC....2	50.09.0101	TL 072 CP		Mot, Ti, NS
IC....3	50.05.0283	LM 393 ..		NS, Sig, Ti, Tho
IC....4	50.09.0101	TL 072 CP		Mot, Ti, NS
IC....5	50.10.0106	TL 431CLP		Mot, Ti
IC....6	1.820.997.20	Comutation logic device		St
L....1	62.03.0010	48 uH		2 A, filter
L....2	1.022.251.00	203 uH		Filtercoil
L....3	62.99.0113	1.0 uH		
L....4	62.99.0113	1.0 uH		
L....5	62.02.3222	2.2 mH	10%, Rad, RM 5	
L....6	62.02.3222	2.2 mH	10%, Rad, RM 5	
P....1	54.02.0418	Connector	6 contacts, MOLEX, see note 2	
P....2	54.14.2102	Connector	16 contacts, latch, flat cable	
P....3	54.02.0408	Connector	12 contacts, MOLEX, see note 1	
Q....1	50.03.1502	IRF 522	MTP 8N10	IR, Mot
Q....2	50.03.1502	IRF 522	MTP 8N10	IR, Mot
Q....3	50.03.0350	J-112		Mot
Q....4	50.03.0340	BC 337-25		ITT, Ph, Sie
Q....5	50.03.0351	BC 327-25		ITT, Ph, Sie
Q....6	50.03.1505	VN 0808 M	ZVN 0108 A	Fe, Six
Q....7	50.03.0351	BC 327-25		ITT, Ph, Sie
Q....8	50.03.0340	BC 337-25		ITT, Ph, Sie
Q....9	50.03.0351	BC 327-25		ITT, Ph, Sie
Q....10	50.03.0340	BC 337-25		ITT, Ph, Sie
Q....11	50.03.0351	BC 327-25		ITT, Ph, Sie
Q....12	50.03.0340	BC 337-25		ITT, Ph, Sie
Q....13	50.03.0749	80 680		Ph
Q....14	50.03.0799	80 680	see note 3	Ph
Q....15	50.03.0749	80 679	see note 3	Ph
Q....16	50.03.0799	80 680	see note 3	Ph
Q....17	50.03.0749	80 679	see note 3	Ph
Q....18	50.03.0799	80 680	see note 3	Ph
R....1	57.56.5228	0.22 Ohm	10%, 4 W, MW	
R....2	57.11.3100	10 Ohm	10%	
R....3	57.11.3103	3.3 kOhm	10%	
R....4	57.11.3100	10 Ohm	10%	
R....5	57.11.3323	3.3 kOhm	10%	
R....6	57.11.3100	10 Ohm	10%	
R....7	57.11.3123	12 kOhm	1%	
R....8	57.11.3123	12 kOhm	1%	
R....9	57.11.3302	3 kOhm	1%	
R....10	57.11.3302	3 kOhm	1%	
R....11	57.11.3103	10 kOhm	10%	
R....12	57.11.3103	10 kOhm	10%	
R....13	57.11.3103	10 kOhm	10%	
R....14	57.11.3103	10 kOhm	10%	
R....15	57.11.3103	10 kOhm	10%	
R....16	57.11.3103	10 kOhm	10%	
R....17	57.11.3103	10 kOhm	10%	
R....18	57.11.3472	4.7 kOhm	10%	
R....19	57.11.5155	1.5 MOhm	10%	
R....20	57.11.3104	100 kOhm	10%	
R....21	57.11.3221	220 Ohm	10%	
R....22	57.11.3101	100 Ohm	10%	
R....23	57.11.3223	22 kOhm	10%	
R....24	57.11.3103	10 kOhm	10%	
R....25	57.11.3103	10 kOhm	10%	
R....26	57.11.3103	10 kOhm	10%	
R....27	00.00.0000	not used		
R....28	57.11.3272	2.7 kOhm	1%	
R....29	57.11.3101	100 Ohm	10%	
R....30	57.11.3752	7.5 kOhm	1%	
R....31	57.11.3152	1.5 kOhm	10%	
R....32	57.11.3223	22 kOhm	10%	
R....33	00.00.0000	not used		
R....34	57.11.3133	13 kOhm	1%	
R....35	57.11.3681	680 Ohm	1%	
R....36	57.11.3362	3.6 kOhm	1%	
R....37	57.11.3102	1 kOhm	10%	
R....38	57.11.3103	10 kOhm	10%	
R....39	57.11.3470	47 Ohm	10%	
R....40	57.11.3470	47 Ohm	10%	
R....41	57.11.3102	1 kOhm	10%	
R....42	57.11.3221	220 Ohm	10%	
R....43	57.11.3102	1 kOhm	10%	
R....44	57.11.3332	3.3 kOhm	10%	
R....45	57.11.3470	47 Ohm	10%	
R....46	57.11.3102	1 kOhm	10%	
R....47	57.11.3332	3.3 kOhm	10%	
R....48	57.11.3221	220 Ohm	10%	
R....49	57.11.3102	1 kOhm	10%	
R....50	57.11.3470	47 Ohm	10%	
R....51	57.11.3332	3.3 kOhm	10%	
R....52	57.11.3102	1 kOhm	10%	
R....53	57.11.3221	220 Ohm	10%	
R....54	57.11.3102	1 kOhm	10%	
R....55	57.11.3222	2.2 kOhm	10%	
R....56	57.11.3222	2.2 kOhm	10%	
R....57	57.11.3222	2.2 kOhm	10%	
R....58	57.11.3222	2.2 kOhm	10%	
R....59	57.11.3222	2.2 kOhm	10%	
R....60	57.11.3222	2.2 kOhm	10%	
RZ....1	57.88.4332	Network	8 * 3.3 kOhm, 2%, SIP 9	
T....1	1.822.247.00	Drive Transformer		St
TP....1	54.02.0320	Connector	1 contact, 2.8*0.8, flat	
TP....2	54.02.0320	Connector	1 contact, 2.8*0.8, flat	
TP....3	54.02.0320	Connector	1 contact, 2.8*0.8, flat	
TP....4	54.02.0320	Connector	1 contact, 2.8*0.8, flat	
TP....5	54.02.0320	Connector	1 contact, 2.8*0.8, flat	
W....1	1.010.321.64	Wire bridge		
Note 1 - Connector:	Case:	Studer Nr. 54.02.0408		
	Molex Nr. 03-06-2121			
	Contact pin:	Studer Nr. 54.02.0406		
	Molex Nr. 02-06-8103			
Note 2 - Connector:	Case:	Studer Nr. 54.02.0418		
	Molex Nr. 03-06-2061			
	Contact pin:	Studer Nr. 54.02.0406		
	Molex Nr. 02-06-8103			
Note 3 - For excellent wow and flutter values at 3.75 ips the NPN -				
respective the PNP - Transistors should be from the same				
type and manufacturer.				
C=Ceramic, El=Electrolytic, PETP=Polyester Film, PP=Polypropylen				
MANUFACTURER: E=Exar, Fe=Ferranti, GI=General Instruments,				
ITT=Intermetall, IPS=Integrated Power Semiconductors Ltd.,				
MHI=Monolithic Memories Inc., Mot=Motorola,				
NS=National Semiconductors, Ph=Philips, Ra=Raytheon,				
RC=Radio Corporation of America, Sie=Siemens, Sig=Signetics,				
Ses=Secosem, Six=Siliconix, SGS=SGS-Ates, St=Studer,				
T=Telefunken, TI=Texas Instruments, To= Toshiba.				
1.820.774.27 CAP. MOT. DRIVE AMP. BOARD ML 94/02/2400				

STUDER	CAPSTAN MOTOR DRIVE AMPL. ESE	1.820.774-27
--------	-------------------------------	--------------

EDITION: JULI 1995

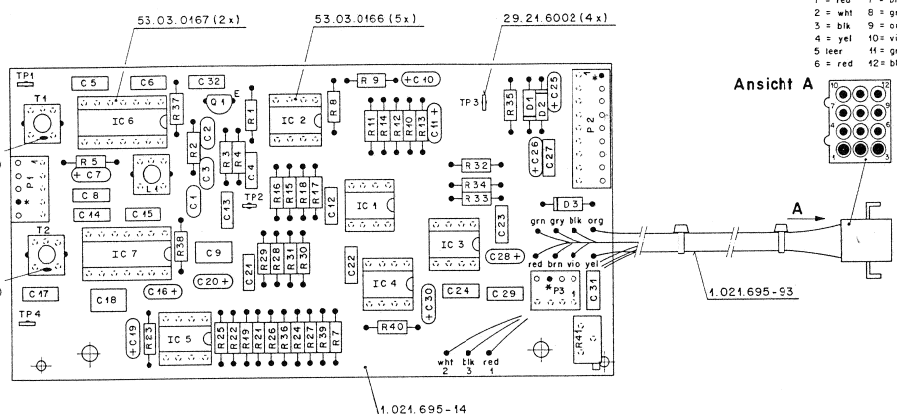


TACHO SENSOR ELECTRONICS PCB 1.021.695.86





TACHO SENSOR ELECTRONICS PCB 1.021.695.86



Idx.	Pos.	Par. No.	Qty.	Type/Val.	Description
0	C 1	59.34.4101	100p	CER 63V, 5%, N750	
0	C 2	59.34.5561	560p	CER 63V, 5%, N1500	
0	C 3	59.34.4151	150p	CER 63V, 5%, N750	
0	C 4	59.06.0102	1n0	PETP, 63V, 10%, RMS	
0	C 5	59.06.0223	22n	PETP, 63V, 10%, RMS	
0	C 6	59.06.0223	22n	PETP, 63V, 10%, RMS	
0	C 7	59.26.2100	10u	SAL, 20%, 16V	
0	C 8	59.06.0473	47n	PETP, 63V, 10%, RMS	
0	C 9	59.06.0105	1u0	PETP, 50V, 10%, RMS	
0	C 10	59.26.9109	1u	SAL, 20%, 40V	
0	C 11	59.26.2100	10u	SAL, 20%, 16V	
0	C 12	59.06.0683	68n	PETP, 63V, 10%, RMS	
0	C 13	59.06.0102	1n0	PETP, 63V, 10%, RMS	
0	C 14	59.06.0223	22n	PETP, 63V, 10%, RMS	
0	C 15	59.06.0223	22n	PETP, 63V, 10%, RMS	
0	C 16	59.26.2100	10u	SAL, 20%, 16V	
0	C 17	59.06.0473	47n	PETP, 63V, 10%, RMS	
0	C 18	59.06.0105	1u0	PETP, 50V, 10%, RMS	
0	C 19	59.26.9109	1u	SAL, 20%, 40V	
0	C 20	59.26.2100	10u	SAL, 20%, 16V	
0	C 21	59.06.0683	68n	PETP, 63V, 10%, RMS	
0	C 22	59.06.0222	2n2	PETP, 63V, 10%, RMS	
0	C 23	59.06.0222	2n2	PETP, 63V, 10%, RMS	
0	C 24	59.06.0222	2n2	PETP, 63V, 10%, RMS	
0	C 25	59.26.1220	22u	SAL, 20%, 10V	
0	C 26	59.26.1220	22u	SAL, 20%, 10V	
0	C 27	59.06.0683	68n	PETP, 63V, 10%, RMS	
0	C 28	59.26.2100	10u	SAL, 20%, 16V	
0	C 29	59.06.0683	68n	PETP, 63V, 10%, RMS	
0	C 30	59.26.1479	4u7	SAL, 20%, 10V	
0	C 31	59.06.0104	100n	PETP, 63V, 10%, RMS	
0	C 32	59.06.0683	68n	PETP, 63V, 10%, RMS	
0	D 1	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 2	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 3	50.04.0122	1N4301	1A, DO 41	
0	IC 1	50.15.0114	9637	Dual diff Line Receiver	
0	IC 2	50.09.0101	TL072	IC TL 072 CN	A
0	IC 3	50.05.0283	LM393	Dual Comparator	
0	IC 4	50.05.0283	LM393	Dual Comparator	
0	IC 5	50.09.0101	TL072	IC TL 072 CN	A
0	IC 6	50.11.0151	TBA120U	IC TBA 120 UV/5	
0	IC 7	50.11.0151	TBA120U	IC TBA 120 UV/5	
0	L 1	1.022.222.00	L16mH	HF-DROSSEL 16 MH	
0	P 1	54.01.0288	5-P	J LEISTE 5 POL CIS AUFST.	
0	P 2	54.01.0217	9-P	J LEISTE 9 POL CIS AUFST.	
0	P 3	54.01.0241	4-P	J LEISTE 4 POL CIS AUFST.	
0	Q 1	50.03.0514	BF366	BF 366 NPN	
0	R 1	57.11.3103	10k	MF, 1%, 0207	
0	R 2	57.11.3103	10k	MF, 1%, 0207	
0	R 3	57.11.3102	1k0	MF, 1%, 0207	
0	R 4	57.11.3121	120R	MF, 1%, 0207	
0	R 5	57.11.3121	120R	MF, 1%, 0207	
0	R 6		not used	not used	
0	R 7	57.11.3223	22k	MF, 1%, 0207	
0	R 8	57.11.3183	18k	MF, 1%, 0207	
0	R 9	57.11.3152	1k5	MF, 1%, 0207	
0	R 10	57.11.3103	10k	MF, 1%, 0207	
0	R 11	57.11.3103	10k	MF, 1%, 0207	
0	R 12	57.11.3103	10k	MF, 1%, 0207	
0	R 13	57.11.3103	10k	MF, 1%, 0207	
0	R 14	57.11.3105	1M0	MF, 1%, 0207	
0	R 15	57.11.3103	10k	MF, 1%, 0207	
0	R 16	57.11.3562	5k6	MF, 1%, 0207	
0	R 17	57.11.3103	10k	MF, 1%, 0207	
0	R 18	57.11.3103	10k	MF, 1%, 0207	
0	R 19	57.11.3121	120R	MF, 1%, 0207	
0	R 20		not used	not used	
0	R 21	57.11.3223	22k	MF, 1%, 0207	
0	R 22	57.11.3183	18k	MF, 1%, 0207	
0	R 23	57.11.3152	1k5	MF, 1%, 0207	
0	R 24	57.11.3103	10k	MF, 1%, 0207	
0	R 25	57.11.3103	10k	MF, 1%, 0207	
0	R 26	57.11.3103	10k	MF, 1%, 0207	
0	R 27	57.11.3103	10k	MF, 1%, 0207	
0	R 28	57.11.3103	10k	MF, 1%, 0207	
0	R 29	57.11.3562	5k6	MF, 1%, 0207	
0	R 30	57.11.3103	10k	MF, 1%, 0207	

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 31	57.11.3103	10k	MF, 1%, 0207	
0	R 32	57.11.3472	4k7	MF, 1%, 0207	
0	R 33	57.11.3472	4k7	MF, 1%, 0207	
0	R 34	57.11.3472	4k7	MF, 1%, 0207	
0	R 35	57.11.3101	100R	MF, 1%, 0207	
0	R 36	57.11.3105	1M0	MF, 1%, 0207	
0	R 37	57.11.3681	680R	MF, 1%, 0207	
0	R 38	57.11.3681	680R	MF, 1%, 0207	
0	R 39	57.11.3822	8k2	MF, 1%, 0207	
0	R 40	57.11.3822	8k2	MF, 1%, 0207	
0	R 41	58.05.0501	500R	10%, 0.5W, Cermet	
1	T 1	1.022.230.82		Trafo	DISKRIMINATORTRAFO
1	T 2	1.022.230.82		Trafo	DISKRIMINATORTRAFO
0	TP 1	29.21.6002	1-P		LOETOESE
0	TP 2	29.21.6002	1-P		LOETOESE
0	TP 3	29.21.6002	1-P		LOETOESE
0	TP 4	29.21.6002	1-P		LOETOESE

End of List

**Comments:**  
 \* Note 1: Pot. Bouras, Nr.: 3296 Z-1-501  
 \* Spectrol, Nr.: 64 Z 501 T 000  
 \* Murata, Nr.: Pot 3105 Z-1-501  
 \* Note 2: Plug. 5-Fin AMP. Nr.: --163.680-3  
 \* Note 3: Plug. 9-Fin AMP. Nr.: --163.680-7  
 \* Note 4: Plug. 3-Fin AMP. Nr.: --163.680-1  
 \* CE=Ceramic, EL=Electrolytic, PETP=Polyester Film  
 \* MANUFACTURER: Fc=Fairchild, Gt=General Instruments, ITT=Intermetall,  
 Mot=Motorola, NS=National Semiconductors, Ph=Philips,  
 Sie=Siemens, St=Studer, Tl=Texas Instruments  
 (ot) T1+T2 -81 changed to -82

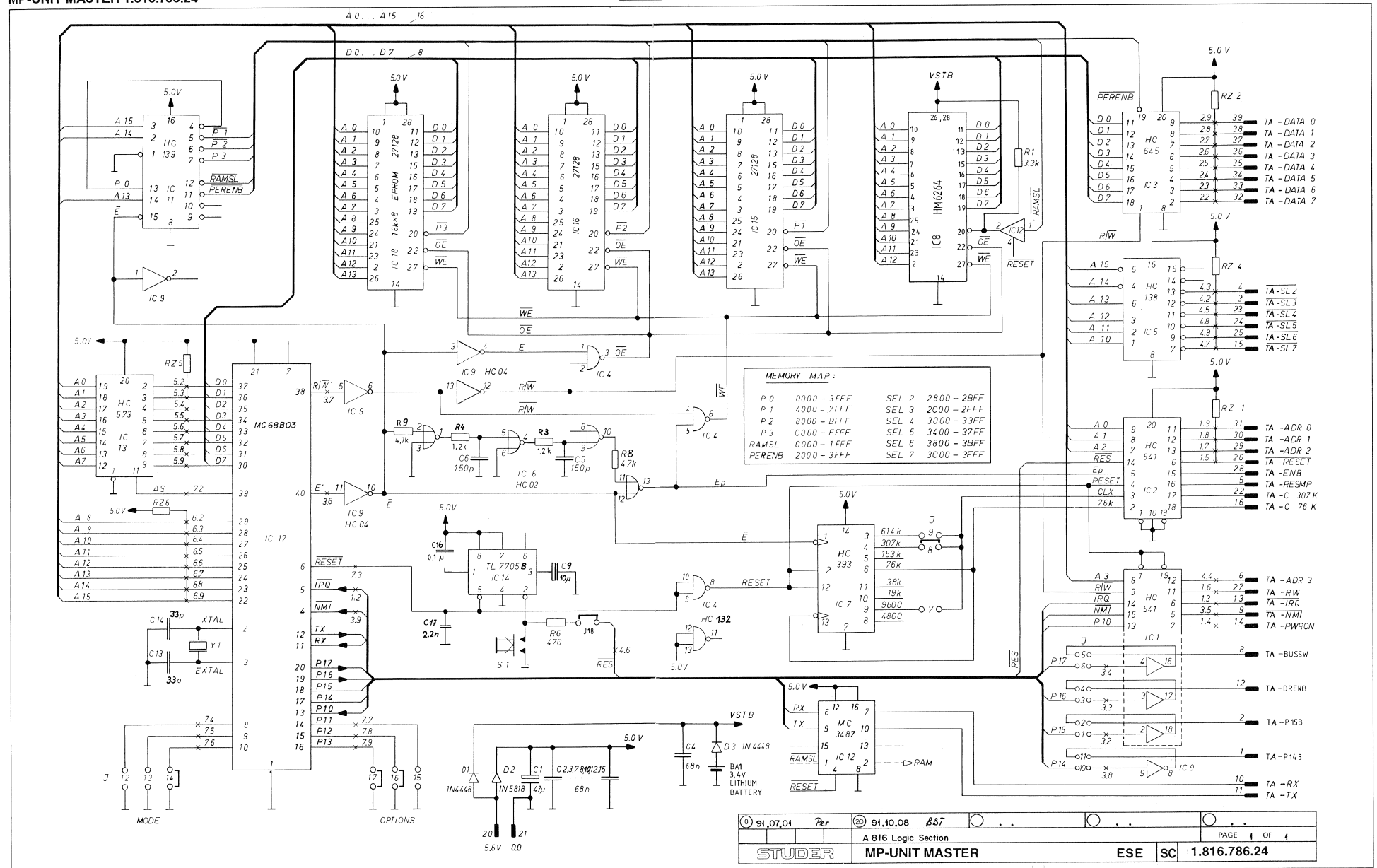
Abrechnung				
Datum	30.9.93	EW	EW	EW
Notizen für				

STUDER  
REGENSDORF  
ZÜRICH

Bezeichnung: TACHO SENSOR  
EL. BOARD ESE

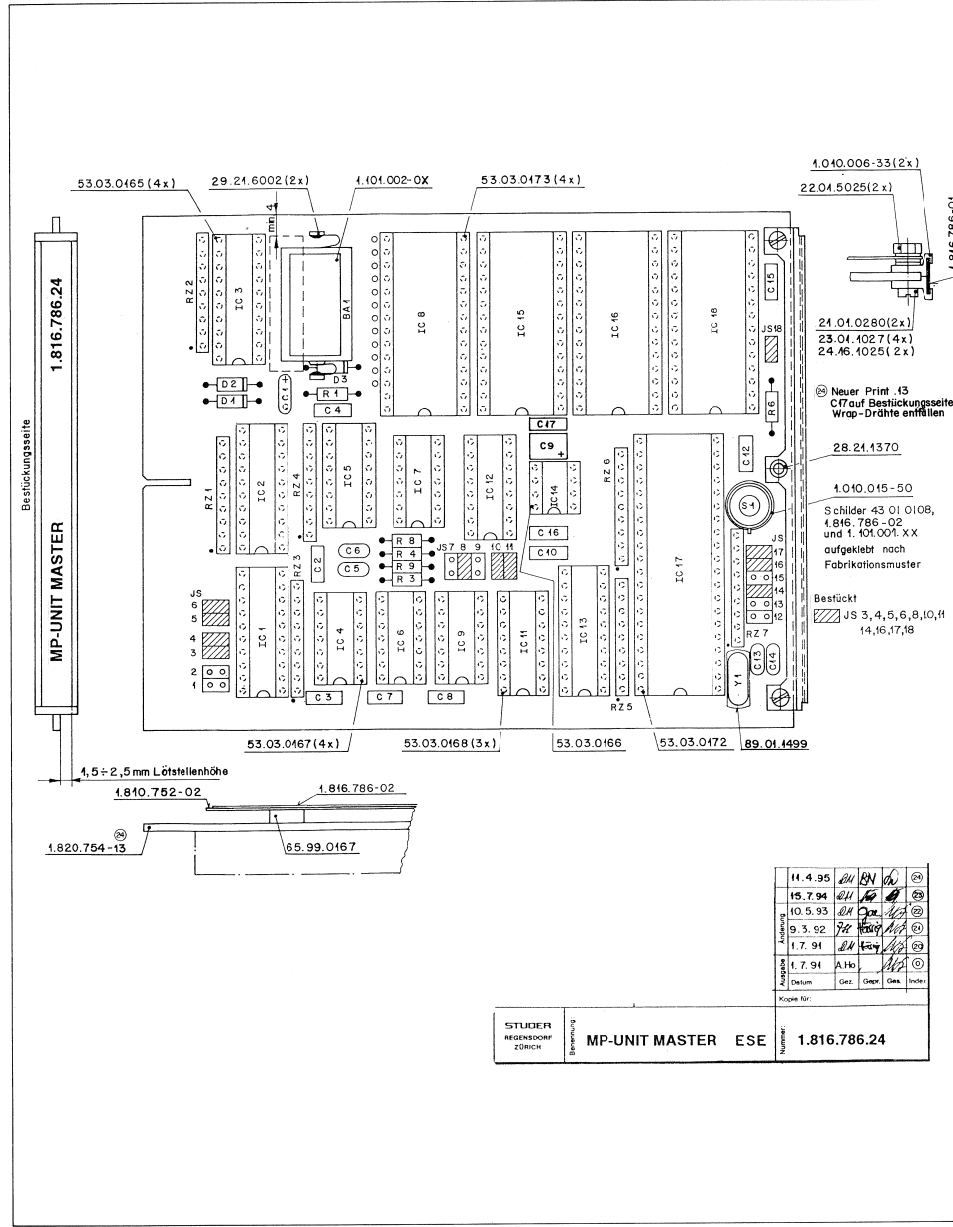
Nr.: 1.021.695-86

MP-UNIT MASTER 1.816.786.24





MP-UNIT MASTER 1.816.786.24



Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
BA	...	89.01.0275	Batt, Lith., 3.6V, D 14.7*25.5	
C	...	59.26.047C	47 uF	Ph
C	...	59.06.0683	68 nF	10K, 63V, PETP
C	...	59.06.0683	68 nF	10K, 63V, PETP
C	...	59.06.0683	68 nF	10K, 63V, PETP
C	...	59.34.7151	150 pF	2%, Ce
C	...	59.34.7151	150 pF	2%, Ce
C	...	59.06.0683	68 nF	10K, 63V, PETP
C	...	59.06.0683	68 nF	10K, 63V, PETP
C	...	59.26.2100	10 nF	20%, 16V, Sal
C	...	59.06.0683	68 nF	10K, 63V, PETP
C	...	00.00.0000	not used	
C	...	59.06.0683	68 nF	10K, 63V, PETP
C	...	59.34.2330	33 pF	5%, Ce
C	...	59.34.2330	33 pF	5%, Ce
C	...	59.06.0683	68 nF	10K, 63V, PETP
C	...	59.06.0683	68 nF	10K, 63V, PETP
C	...	59.06.0104	100 nF	10K, 63V, PETP
C	...	59.06.0222	2.2 nF	10K, 63V, PETP
D	...	50.04.0125	1N 4448	Fc,ITT,Ph,SeS,Tf
D	...	50.04.0512	1N 5818	Not
D	...	50.04.0125	1N 4448	Fc,ITT,Ph,SeS,Tf
I	...	50.17.1541	74 HC 541	Not,NS,Ph,RCA,SGS,TI,To
I	...	50.17.1541	74 HC 541	Not,NS,Ph,RCA,SGS,TI,To
I	...	50.17.1645	74 HC 645	Not,NS,Ph,RCA,SGS,TI,To
I	...	50.17.1132	74 HC 132	Not,NS,Ph,RCA,SGS,TI,To
I	...	50.17.1138	74 HC 138	Not,NS,Ph,RCA,SGS,TI,To
I	...	50.17.1002	74 HC 02	Not,NS,Ph,RCA,SGS,TI,To
I	...	50.17.1393	74 HC 393	Not,NS,Ph,RCA,SGS,TI,To
I	...	50.14.0133	HM6264P-15 TC 5564-15	Hi,To
I	...	50.17.0004	74 HCT 04	Not,NS,Ph,RCA,SGS,TI,To
I	...	00.00.0000	not used	
I	...	50.17.1139	74 HC 139	Not,NS,Ph,RCA,SGS,TI,To
I	...	50.15.0105	MC 3487 P	Not,NS
I	...	50.17.1573	74 HC 573	Not,NS,Ph,RCA,SGS,TI,To
I	...	50.11.0157	TL77058CP	Hi,It
I	...	50.14.2001	27513	
I	...	1.816.996.20	27513	Software 45/91, see note 1
I	...	1.816.996.20	27513	Software 10/92, see note 1
I	...	1.816.996.22	27513	Software 18/93, see note 1
I	...	1.816.996.23	27513	Software 28/94, see note 1
I	...	50.04.0125	27128	HN 48271286-30 Hi,It
I	...	1.816.996.20	27128	Software 45/91, see note 1
I	...	1.816.996.20	27128	Software 10/92, see note 1
I	...	1.816.996.22	27128	Software 18/93, see note 1
I	...	1.816.996.23	27128	Software 28/94, see note 1
I	...	50.16.0107	MC6803P-1	Not,Hi
I	...	50.14.0125	27128	HN 48271286-30 Hi,It
I	...	1.816.996.20	27128	Software 45/91, see note 1
I	...	1.816.996.20	27128	Software 10/92, see note 1
I	...	1.816.996.22	27128	Software 18/93, see note 1
I	...	1.816.996.23	27128	Software 28/94, see note 1
JS	...	...	...	see note 2
JS	...	...	...	see note 2
JS	...	...	...	see note 2
JS	...	...	...	see note 2
JS	...	...	...	see note 2
JS	...	...	...	see note 2
JS	...	...	...	see note 2
JS	...	...	...	see note 2
JS	...	...	...	see note 2
JS	...	...	...	see note 2
JS	...	...	...	see note 2
JS	...	...	...	see note 2
JS	...	...	...	see note 2
JS	...	...	...	see note 2
JS	...	...	...	see note 2
JS	...	...	...	see note 2
JS	...	...	...	see note 2
MP	...	29.21.6002	...	see note 3
MP	...	29.21.6002	...	see note 3
R	...	57.11.3332	3.3 kOhm 5k	see note 3
R	...	00.00.0000	not used	see note 3
R	...	57.11.3122	1.2 kOhm 5k	see note 3
R	...	57.11.3122	1.2 kOhm 5k	see note 3
R	...	00.00.0000	not used	see note 3
R	...	57.11.3471	470 Ohm 5k	see note 3
R	...	00.00.0000	not used	see note 3
R	...	57.11.3472	4.7 kOhm 5k	see note 3
R	...	57.11.3472	4.7 kOhm 5k	see note 3
RZ	...	57.88.4332	...	see note 3
RZ	...	57.88.4332	...	see note 3
RZ	...	57.88.4332	...	see note 3
RZ	...	57.88.4332	...	see note 3
RZ	...	57.88.4332	...	see note 3
RZ	...	57.88.4332	...	see note 3
S	...	55.03.0122	Chicago Switch 34-550-001	
Y	...	89.01.0560	4.5152 MHz, +100 ppm	
(20)	91/10/08	Software 45/91		
(21)	92/03/09	Software 10/92 (RBT Confirmed)		



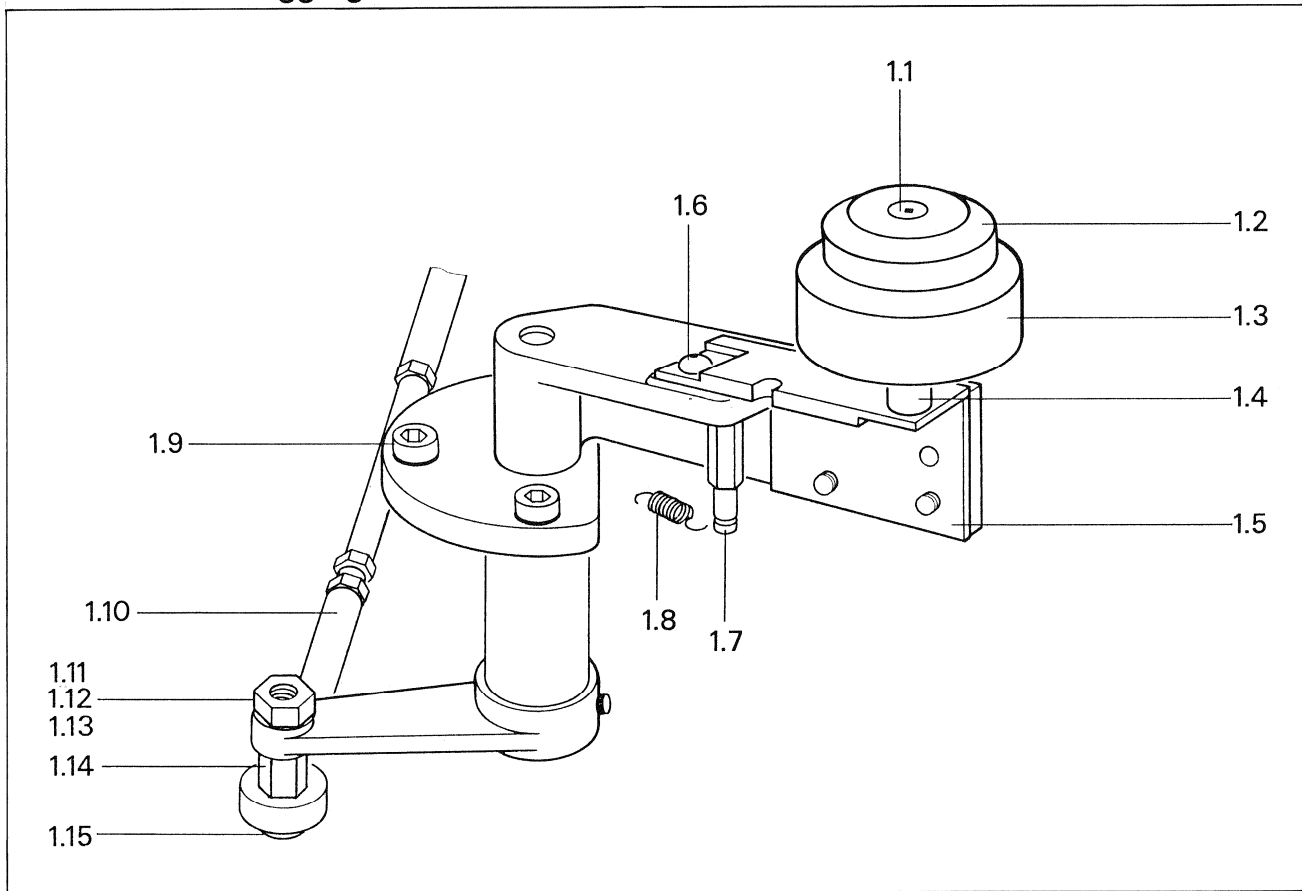
---

**Bandabhebeaggregat, Andruckmechanik**


---

Pos.	Menge	Bestell-Nr.	Bezeichnung	Spezifikation
1	1	1.014.732.00	Abhebemagnet	
2	1	1.014.731.00	Andruckmagnet	
3	1	1.816.130.00	Bandabhebeaggregat	
3.1	1	1.816.131.00	Bandabheberolle komplett	
3.2	1	1.862.120.07	Gelenkstück	
4	1	1.816.132.00	Zugstange zu Abhebemagnet, kompl.	
5	1	1.816.142.00	Anker mit Gelenkstück	
5.1	1	1.816.140.05	Gewindestange zu Andruckmagnet	
5.2	1	1.862.120.07	Gelenkstück	
5.3	1	1.010.219.37	Andruckfeder	
6	1	1.816.090.34	Gewindestange zu Edithobel	
7	1	1.816.134.08	Drehknopf (EDIT)	

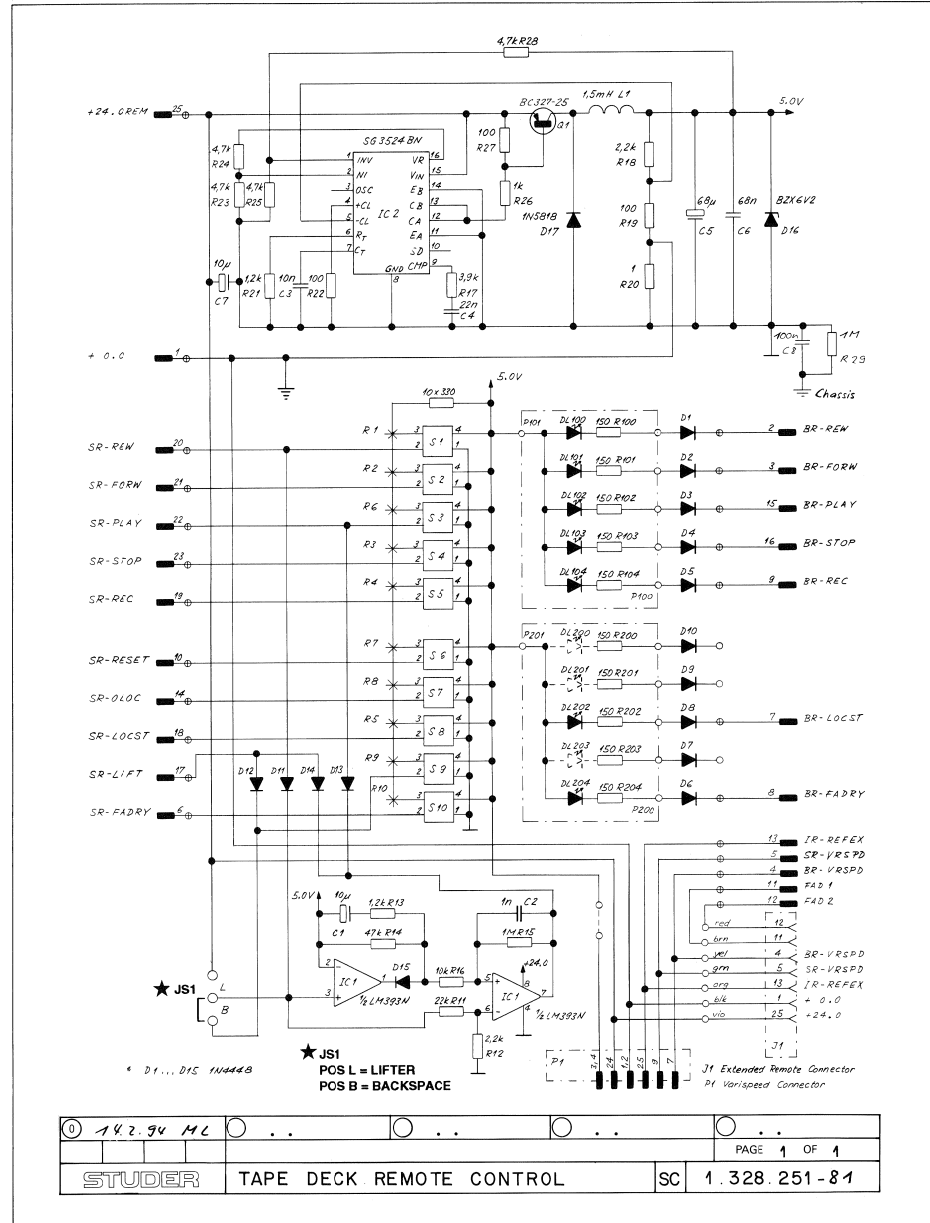
## 9.6 Andruckaggregat



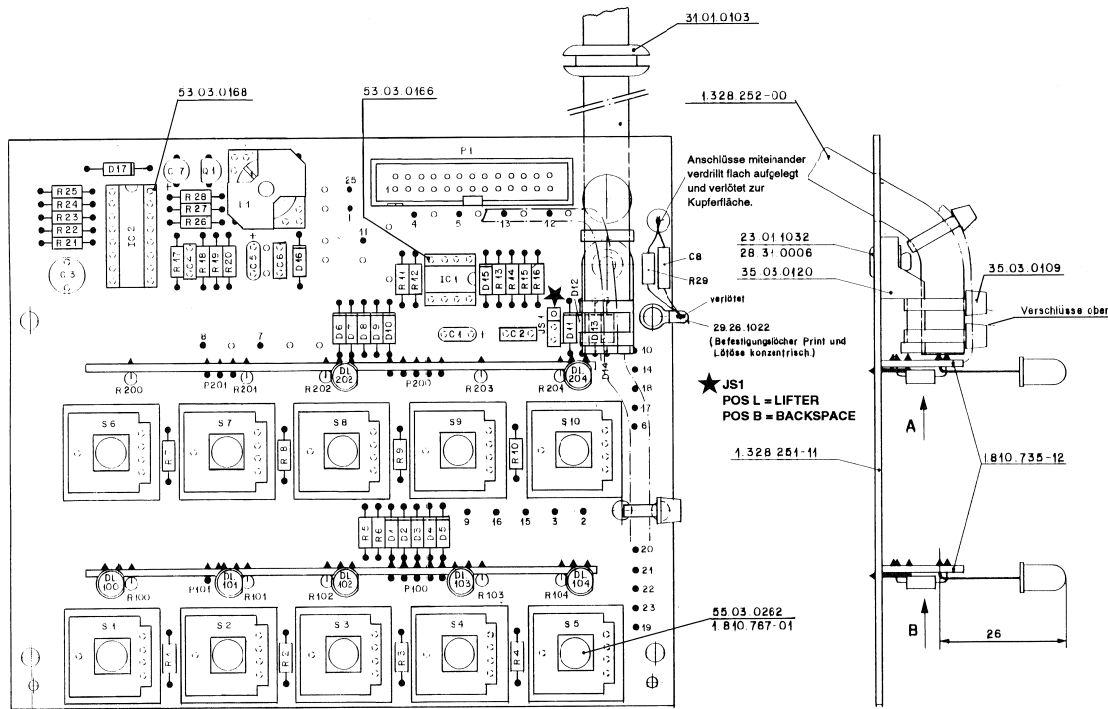
Andruckaggregat

Pos.	Menge	Bestell-Nr.	Bezeichnung	Spezifikation
<b>1</b>	<b>1</b>	<b>1.816.140.00</b>	<b>Andruckaggregat kompl.</b>	
1.1	1	1.010.036.21	Senkschraube spezial	M4 x 14
1.2	1	1.816.090.45	Rollendeckel	
1.3	1	1.816.138.00	Andruckrolle	
1.4	1	1.816.141.04	Andruckrollen-Achse	
1.5	1	1.816.141.03	Achsenhalter, einstellbar	
1.6	1	21.51.8455	Linsenschraube	M4 x 8
1.7	1	1.816.141.05	Sechskantbolzen spezial	
1.8	1	1.010.104.37	Feder	D5 / 13,6
1.9	3	21.53.0457	Z-Schraube mit Sicherungsscheibe	M4 x 12
1.10	1	1.862.120.07	Bronzehebel	
1.11	1	22.01.8040	Mutter	M4/0,8 D
1.12	1	23.01.1040	Rippenscheibe	zu M4
1.13	1	23.01.1043	Unterlagsscheibe	D 4,3/8,0
1.14	1	1.816.140.03	Sechskantbolzen spezial	
1.15	1	24.16.3032	Benzing-Sicherungsscheibe	D 3,2

TAPE DECK REMOTE CONTROL CABINET (PARALLEL) 1.328.250.81  
 - Tape Deck Remote Control PCB 1.328.251.81



TAPE DECK REMOTE CONTROL CABINET (PARALLEL) 1.328.250.81  
 - Tape Deck Remote Control PCB 1.328.251.81



Anschlüsse miteinander  
verdrillt flach aufgelegt  
und verlötet zur  
Kupferfläche.

23 01 1032  
28 31 0006  
35 05 0120

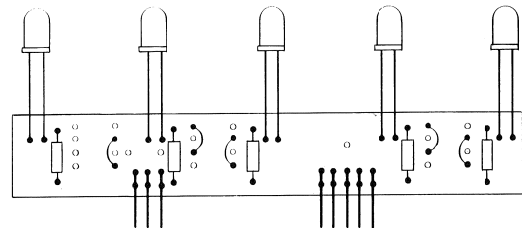
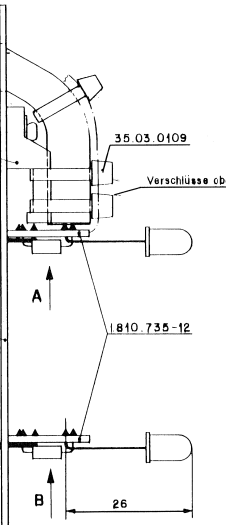
verlötet

29 26 1022  
(Befestigungslöcher Print und  
Lötlöse konservieren)

★ JS1  
POS L = LIFTER  
POS B = BACKSPACE

1.328 251-11

55 03 0262  
1 810 787-01



Ansicht A+B  
 A nur 2 DL und 2 Draht-  
brücken bestückt.

Ad	POS	REF.No.	DESCRIPTION	MANUFACTURER	
C....1		59.26.2100	10 uF	20%, 16V, Sal	Ph
C....2		59.06.5102	1 nF	5%, PETP	
C....3		59.05.1102	10 nF	1%, PP	
C....4		59.06.0221	22 nF	10%, PETP	
C....5		59.26.0680	68 uF	20%, 6.3V, Sal	Ph
C....6		59.06.0683	68 nF	20%, PETP	
C....7		59.22.5100	10 uF	-10%, 40V, EI	
C....8		59.03.2104	1 nF		
D....1		50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
D....2		50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
D....3		50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
D....4		50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
D....5		50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
D....6		50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
D....7		50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
D....8		50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
D....9		50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
D....10		50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
D....11		50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
D....12		50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
D....13		50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
D....14		50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
D....15		50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
D....16		50.04.1118	6.2 V Z		ITT,Ses
D....17		50.04.0512	1N5818		ITT,Ses
DL...100		50.04.2112	MW5353	CM4-5848, HLMF-3401	CM,GI,HP
DL...101		50.04.2112	MW5353	CM4-5848, HLMF-3401	CM,GI,HP
DL...102		50.04.2112	MW5353	CM4-5848, HLMF-3401	CM,GI,HP
DL...103		50.04.2112	MW5353	CM4-5848, HLMF-3401	CM,GI,HP
DL...104		50.04.2111	MW5753	CM4-2848, HLMF-3301	CM,GI,HP
DL...200			not used		

Ad	POS	REF.No.	DESCRIPTION	MANUFACTURER
DL...201			not used	
DL...202		50.04.2112	MW5353	CM4-5848, HLMF-3401
DL...203			not used	
DL...204		50.04.2112	MW5353	CM4-5848, HLMF-3401
IC....1		50.05.0283	LM933N	NS,Tho,TI
IC....2		50.05.0279	SG35248N	SG
JS....1			See note 1	
L....1		1.022.197.00	1.5 mH	St
P....1		54.14.2003	26 cont.	See note 2
P...100		54.01.0269	5 cont.	AMP Nr. 163.740-3
P...101		54.01.0227	3 cont.	AMP Nr. 163.740-1
P...200		54.01.0269	5 cont.	AMP Nr. 163.740-3
P...201		54.01.0227	3 cont.	AMP Nr. 163.740-1
Q....1		50.03.0351	BC327-25	ITT,Ph,Sie
R....1		57.11.3331	330 Ohm	
R....2		57.11.3331	330 Ohm	
R....3		57.11.3331	330 Ohm	
R....4		57.11.3331	330 Ohm	
R....5		57.11.3331	330 Ohm	
R....6		57.11.3331	330 Ohm	
R....7		57.11.3331	330 Ohm	
R....8		57.11.3331	330 Ohm	
R....9		57.11.3331	330 Ohm	
R....10		57.11.3331	330 Ohm	
R....11		57.11.3223	22 kOhm	
R....12		57.11.3222	2.2 kOhm	
R....13		57.11.3122	1.2 kOhm	
R....14		57.11.3473	47 kOhm	
R....15		57.11.3105	1 Mohm	
R....16		57.11.3103	10 kOhm	
R....17		57.11.3392	3.9 kOhm	
R....18		57.11.3222	2.2 kOhm	
R....19		57.11.3101	100 Ohm	
R....20		57.11.3109	1 Ohm	
R....21		57.11.3122	1.2 kOhm	
R....22		57.11.3101	100 Ohm	
R....23		57.11.3472	4.7 kOhm	
R....24		57.11.3472	4.7 kOhm	
R....25		57.11.3472	4.7 kOhm	
R....26		57.11.3102	1 kOhm	
R....27		57.11.3101	100 Ohm	
R....28		57.11.3472	4.7 kOhm	
R....29		57.11.3105	1 Mohm	
R...100		57.11.3151	150 Ohm	
R...101		57.11.3151	150 Ohm	
R...102		57.11.3151	150 Ohm	
R...103		57.11.3151	150 Ohm	
R...104		57.11.3151	150 Ohm	
R...200		57.11.3151	150 Ohm	
R...201		57.11.3151	150 Ohm	
R...202		57.11.3151	150 Ohm	
R...203		57.11.3151	150 Ohm	
R...204		57.11.3151	150 Ohm	

Ad	POS	REF.No.	DESCRIPTION	MANUFACTURER
S....1			See note 3	
S....2			See note 3	
S....3			See note 3	
S....4			See note 3	
S....5			See note 3	
S....6			See note 3	
S....7			See note 3	
S....8			See note 3	
S....9			See note 3	
S....10			See note 3	
Note 1			Contact pin: Studer 54.01.0020, Berg 75 160-102-36 Bridge: Studer 54.01.0021, Philips 2422 024 88003	
Note 2			Connector: Yamachi FAP-26-08/4, Burndy BPH 9 8 26 800 GS	
Note 3			Switch: Studer 55.03.0261, Rafi 3.13001.110 Extender: Studer 55.03.0262, Rafi 5.55101.290	

Ce=Ceramic, El=Electrolytic, Sal=Solid aluminium, PETP=Polyesterfilm, Pp=Polypropylen.

MANUFACTURER: CM=Chicago Miniatur, Fc=Fairchild, GI=General Instruments, HP=Howlett Packard, ITT=Intermetall, Mot=Motorola, NS=National Semiconductors, Ph=Philips, Ses=Secossem, SG=Silicon General, Sie=Siemens, St=Studer, Tho=Thomson, TI=Texas Instruments, Tf=Telefunken.

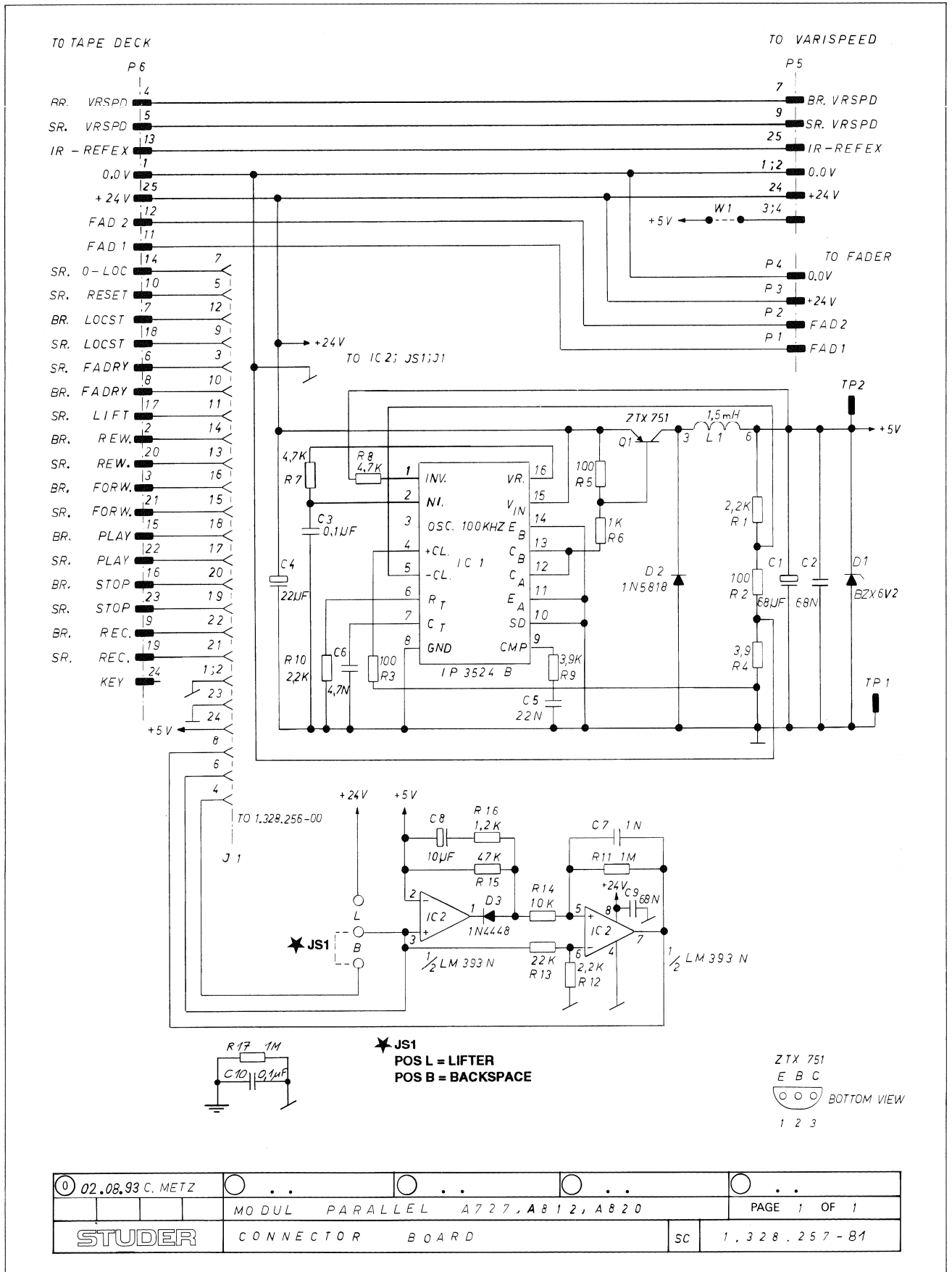
1.328.251.81 TAPE DECK REMOTE CONTROL ML 94/01/2600

STÜCKER  
RECHENBERG  
ZÜRICH

TAPE DECK REMOTE CONTROL BOARD ESE

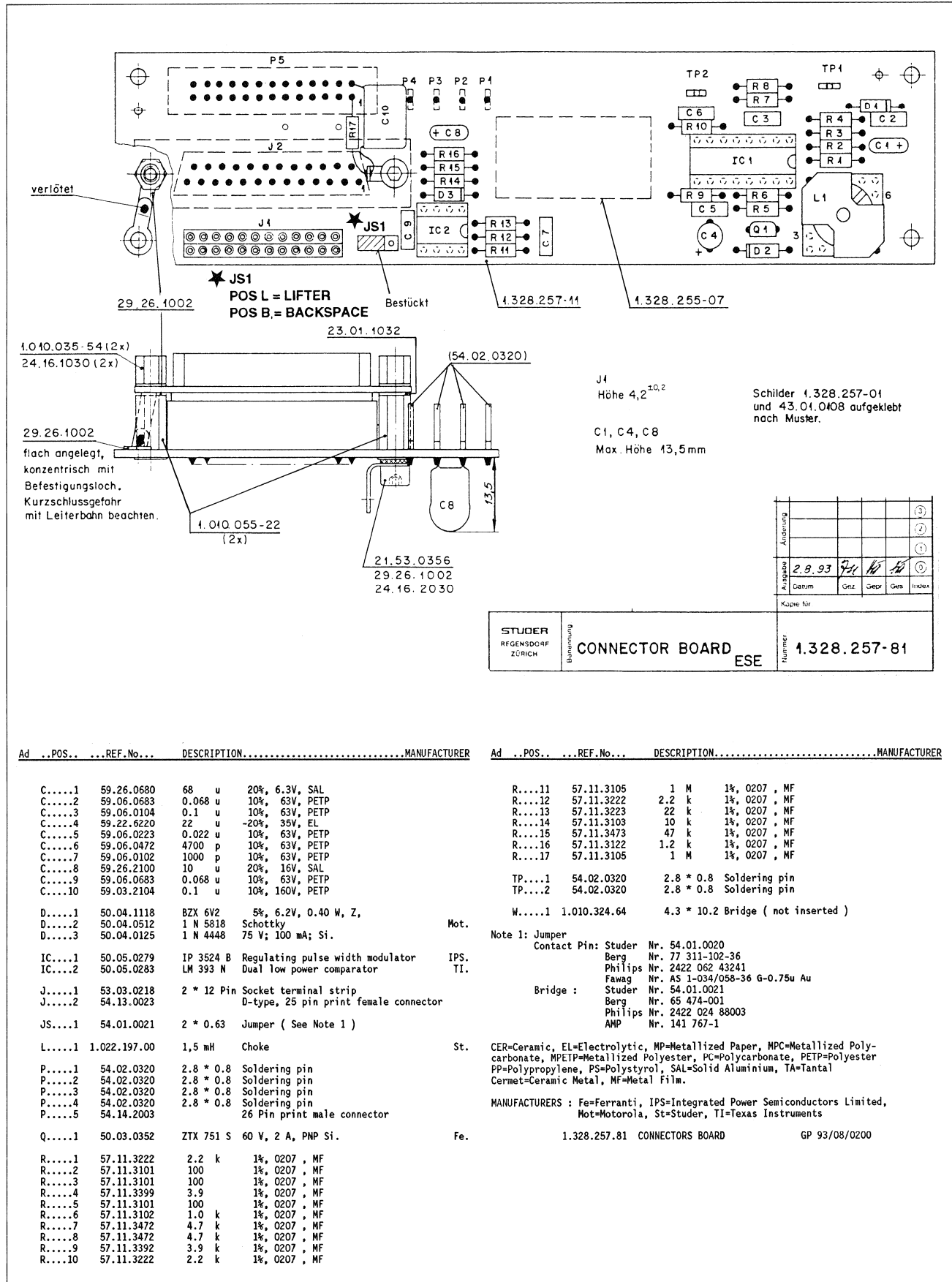
1 328 251-81

**TAPE DECK REMOTE CONTROL MODULE (PARALLEL) 1.328.255.81**  
 - Connector PCB 1.328.257.81



**TAPE DECK REMOTE CONTROL MODULE (PARALLEL) 1.328.255.81**

- Connector PCB 1.328.257.81



Ad	..POS..	..REF.No..	DESCRIPTION	MANUFACTURER
C....1	59.26.0680	68 u	20%, 6.3V, SAL	
C....2	59.06.0683	0.068 u	10%, 63V, PETP	
C....3	59.06.0104	0.1 u	10%, 63V, PETP	
C....4	59.22.6220	22 u	-20%, 35V, EL	
C....5	59.06.0223	0.022 u	10%, 63V, PETP	
C....6	59.06.0472	4700 p	10%, 63V, PETP	
C....7	59.06.0102	1000 p	10%, 63V, PETP	
C....8	59.26.2100	10 u	20%, 16V, SAL	
C....9	59.06.0683	0.068 u	10%, 63V, PETP	
C....10	59.03.2104	0.1 u	10%, 160V, PETP	
D....1	50.04.1118	BZX 6V2	5%, 6.2V, 0.40 W, Z,	
D....2	50.04.0512	1 N 5818	Schottky	Mot.
D....3	50.04.0125	1 N 4448	75 V; 100 mA; Si.	
IC....1	50.05.0279	IP 3524 B	Regulating pulse width modulator	IPS.
IC....2	50.05.0283	LM 393 N	Dual low power comparator	TI.
J....1	53.03.0218	2 * 12 Pin	Socket terminal strip	
J....2	54.13.0023		D-type, 25 pin print female connector	
JS....1	54.01.0021	2 * 0.63	Jumper ( See Note 1 )	
L....1	1.022.197.00	1,5 mH	Choke	St.
P....1	54.02.0320	2.8 * 0.8	Soldering pin	
P....2	54.02.0320	2.8 * 0.8	Soldering pin	
P....3	54.02.0320	2.8 * 0.8	Soldering pin	
P....4	54.02.0320	2.8 * 0.8	Soldering pin	
P....5	54.14.2003		26 Pin print male connector	
Q....1	50.03.0352	ZTX 751 S	60 V, 2 A, PNP Si.	Fe.
R....1	57.11.3222	2.2 k	1%, 0207, MF	
R....2	57.11.3101	100	1%, 0207, MF	
R....3	57.11.3101	100	1%, 0207, MF	
R....4	57.11.3399	3.9	1%, 0207, MF	
R....5	57.11.3101	100	1%, 0207, MF	
R....6	57.11.3102	1.0 k	1%, 0207, MF	
R....7	57.11.3472	4.7 k	1%, 0207, MF	
R....8	57.11.3472	4.7 k	1%, 0207, MF	
R....9	57.11.3392	3.9 k	1%, 0207, MF	
R....10	57.11.3222	2.2 k	1%, 0207, MF	

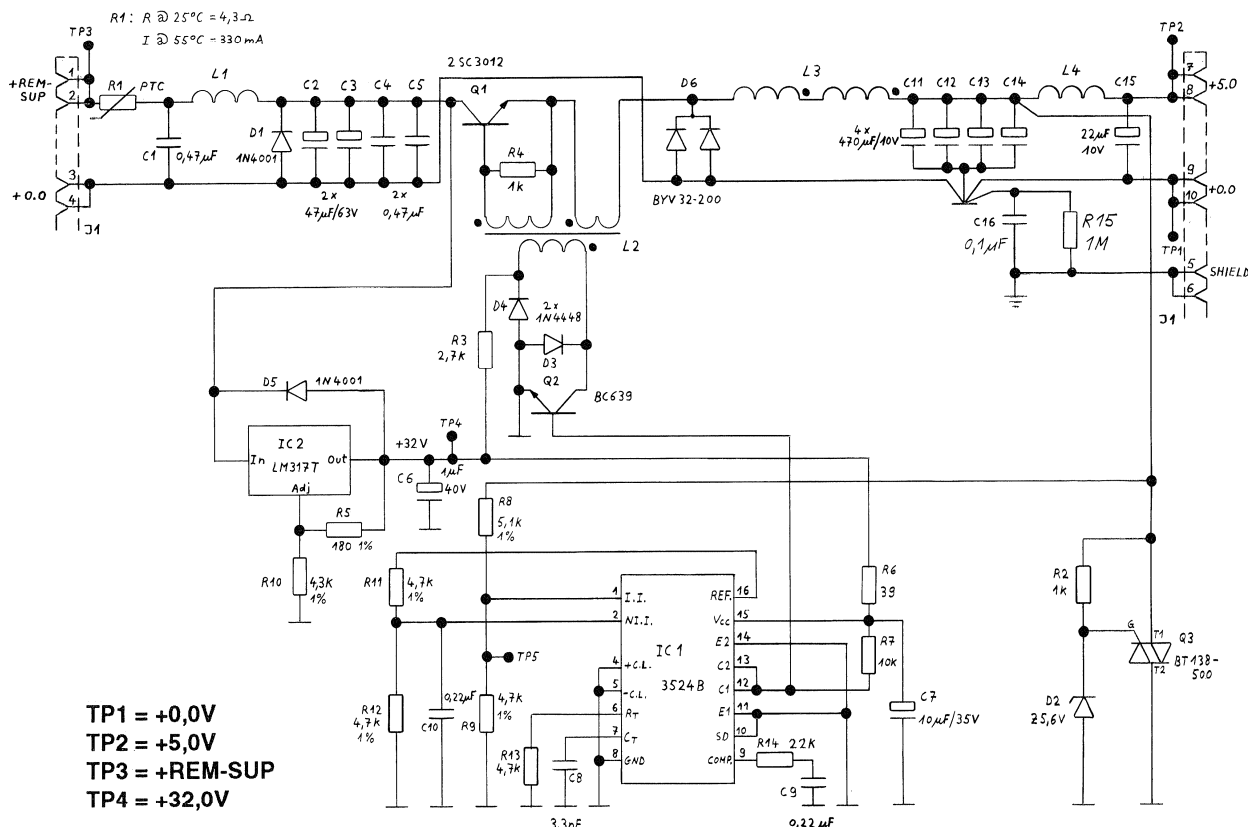
Ad	..POS..	..REF.No..	DESCRIPTION	MANUFACTURER
R....11	57.11.3105	1 M	1%, 0207, MF	
R....12	57.11.3222	2.2 k	1%, 0207, MF	
R....13	57.11.3223	22 k	1%, 0207, MF	
R....14	57.11.3103	10 k	1%, 0207, MF	
R....15	57.11.3473	47 k	1%, 0207, MF	
R....16	57.11.3122	1.2 k	1%, 0207, MF	
R....17	57.11.3105	1 M	1%, 0207, MF	
TP....1	54.02.0320	2.8 * 0.8	Soldering pin	
TP....2	54.02.0320	2.8 * 0.8	Soldering pin	
W....1	1.010.324.64	4.3 * 10.2	Bridge ( not inserted )	
Note 1: Jumper				
Contact Pin: Studer Nr. 54.01.0020				
Berg Nr. 77 311-102-36				
Philips Nr. 2422 062 43241				
Fawag Nr. AS 1-034/058-36 G-0.75u Au				
Bridge : Studer Nr. 54.01.0021				
Berg Nr. 65 474-001				
Philips Nr. 2422 024 88003				
AMP Nr. 141 767-1				
St. CER=Ceramic, EL=Electrolytic, MP=Metallized Paper, MPC=Metallized Poly-carbonate, MPETP=Metallized Polyester, PC=Polycarbonate, PETP=Polyester PP=Polypropylene, PS=Polystyrol, SAL=Solid Aluminium, TA=Tantal Cermet=Ceramic Metal, MF=Metal Film.				
MANUFACTURERS : Fe=Ferranti, IPS=Integrated Power Semiconductors Limited, Mot=Motorola, St=Studer, TI=Texas Instruments				
Fe.		1.328.257.81	CONNECTORS BOARD	GP 93/08/0200

REMOTE TIMER / LAP MODE DISPLAY 1.328.270.00

- Stabilizer PCB 1.328.213.81



L1 : 1.022.252.00  
 L2 : 1.022.224.00  
 L3 : 1.022.217.00  
 L4 : 1.022.202.00



24.10.85 CHE	.	.	.	.
	A820/A812			PAGE 1 OF 1
STUDER	STABILIZER BOARD			SC 1.328.213.81

REMOTE TIMER / LAP MODE DISPLAY 1.328.270.00

- Stabilizer PCB 1.328.213.81

53.03.0168

21.53.0355 (2 x)  
24.46.4030 (2 x)  
23.04.4032 (2 x)

21.53.0353 (2 x)  
24.46.4030 (2 x)  
23.04.4032 (2 x)

1.328.213-03

1.328.213-11

1.328.213-01

21.53.2364

1.040.245-27 (3 x)

1.328.213-02

TP1 = +0,0V  
TP2 = +5,0V  
TP3 = +REM-SUP  
TP4 = +32,0V

53.03.0218 (10x)

Montage nach BV 632

Änderung					③
②					
①					
④	24.10.91	74	10	10	
Ausgabe	Datum	Gez	Gesr	Ges	Index

Kopie für:

Benennung: STABILIZER BOARD ESE

Nummer: 1.328.213-81

Ad	..POS..	..REF.No...	DESCRIPTION	MANUFACTURER
C.....1	59.06.0474	0.47 uF	10%, PETP	
C.....2	59.22.8470	47 uF	20%, 63V, EL	
C.....3	59.22.8470	47 uF	20%, 63V, EL	
C.....4	59.06.0474	0.47 uF	10%, PETP	
C.....5	59.06.0474	0.47 uF	10%, PETP	
C.....6	59.26.9109	1 uF	20%, 40V, SAL	
C.....7	59.22.6100	10 uF	-20%, 35V, EL	
C.....8	59.06.0332	3300 pF	10%, PETP	
C.....9	59.06.0224	0.22 uF	10%, PETP	
C.....10	59.06.0224	0.22 uF	10%, PETP	
C.....11	59.22.3471	470 uF	-20%, 10V, EL	
C.....12	59.22.3471	470 uF	-20%, 10V, EL	
C.....13	59.22.3471	470 uF	-20%, 10V, EL	
C.....14	59.22.3471	470 uF	-20%, 10V, EL	
C.....15	59.26.1220	22 uF	20%, 10V, SAL	
C.....16	59.06.0104	0.1 uF	10%, 50V, PETP	
D.....1	50.04.0122	1N 4001		Mot
D.....2	50.04.1108	5.6 V	BZX83 C 5V6, BZX55 C 5V6, ZPD 5.6 Ses,ITT	
D.....3	50.04.0125	1N 4448		Fc,ITT,Ph,Ses
D.....4	50.04.0125	1N 4448		Fc,ITT,Ph,Ses
D.....5	50.04.0122	1N 4001		Mot
D.....6	50.04.0517	BYV32-200		Mot,Ph
IC....1	50.05.0279	SG 35248N		SG
IC....2	50.10.0104	LM 317T		Tho,Mot,NS,TI
J.....1	00.00.0000		see note 1	
.....1	1.022.252.00	0.32 mH	Filter Coil	St
L.....2	1.022.224.00		Power Supply Transformer	St
L.....3	1.022.217.00	46 uH	HF-Coil, 5A	St
L.....4	1.022.202.00	16.9 ml	Filter Coil	St
Q.....1	50.03.0517	2 SC 3012	NPN	NEC
Q.....2	50.03.0551	BC 639	NPN	Mot,Ph
Q.....3	50.99.0106	T 2800	400V, 8A, Triac	Ph
R....1	57.92.1331	PTC	see note 2	Ph
R....2	57.11.3102	1 kOhm	1%	
R....3	57.11.3272	2.7 kOhm	1%	
R....4	57.11.3102	1 kOhm	1%	
R....5	57.11.3181	180 Ohm	1%	
R....6	57.11.3390	39 Ohm	1%	
R....7	57.11.3103	10 kOhm	1%	
R....8	57.11.3512	5.1 kOhm	1%	
R....9	57.11.3472	4.7 kOhm	1%	
R....10	57.11.3432	4.3 kOhm	1%	
R....11	57.11.3472	4.7 kOhm	1%	
R....12	57.11.3472	4.7 kOhm	1%	
R....13	57.11.3472	4.7 kOhm	1%	
R....14	57.11.3223	22 kOhm	1%	
R....15	57.11.3105	1 MOhm	1%	
TP....1	54.02.0320	Test Point		
TP....2	54.02.0320	Test Point		
TP....3	54.02.0320	Test Point		
TP....4	54.02.0320	Test Point		
TP....5	54.02.0320	Test Point		

EL=Electrolytic, SAL=Solid Aluminium, PETP=Polyester

MANUFACTURERS: Fc=Fairchild, IIT=Intermetall, Mot=Motorola, NEC=Nippon Electric Corp., NS=National Semiconductors, Ph=Philips, Ses=Sescosem, SG=Silicon General, St=Studer Tho=Thomson, TI=Texas Instruments

Note 1 - Connector: 10 pieces Studer Nr.53.03.0218

Note 2 - PTC Thermistor: R @ 25 degree Celsius = 4.7 Ohm  
I @ 55 degree Celsius = 330 mA

Philips Nr.2322 663 13311

1.328.213.81 STABILIZER BOARD

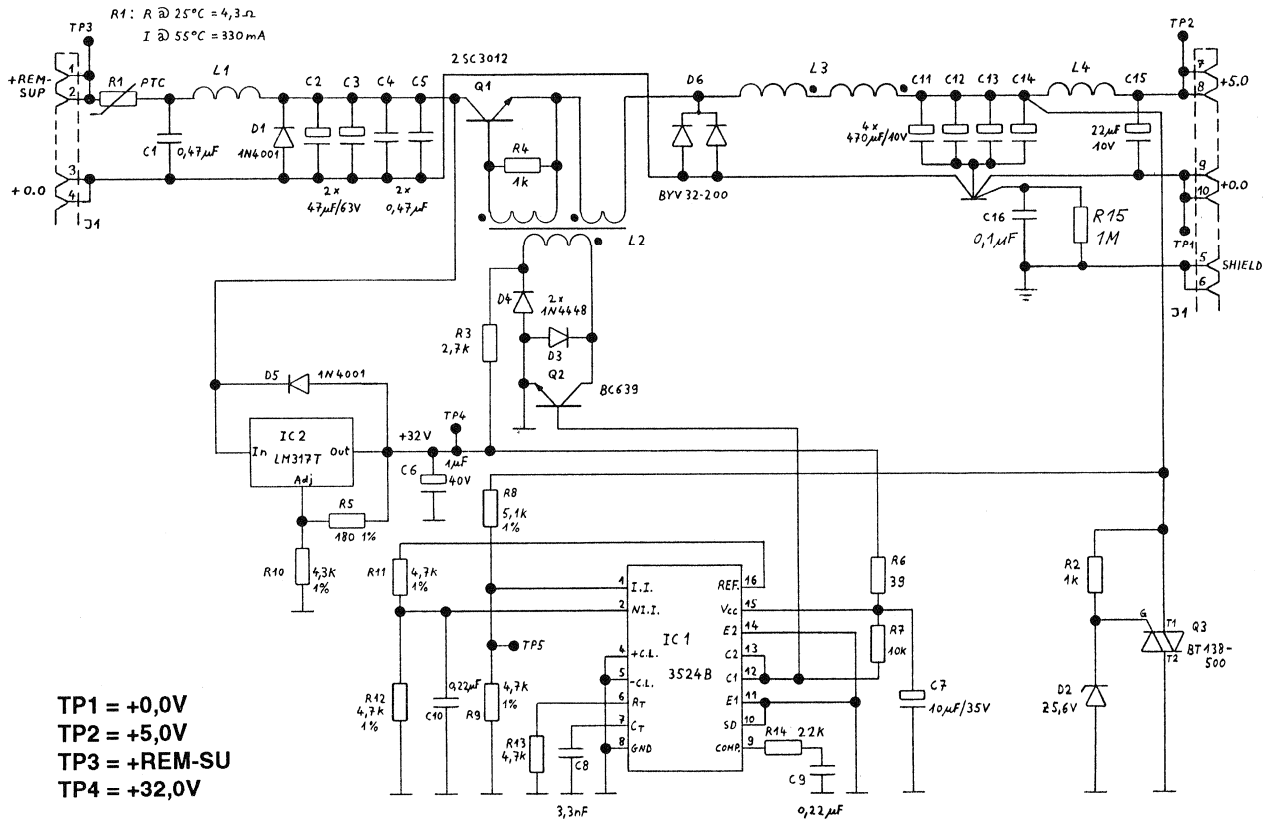
BD91/10/2400



REMOTE CONTROL CABINET (SERIAL) 1.328.210.81  
 REMOTE CONTROL MODULE (SERIAL) 1.328.220.81  
 - Stabilizer PCB 1.328.213.81



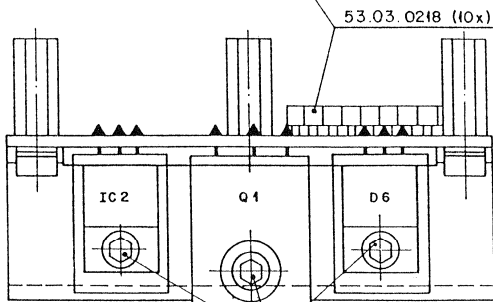
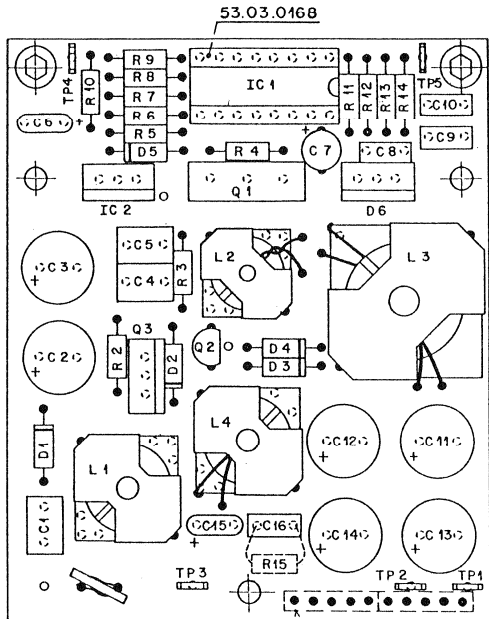
L1 : 1.022.252.00  
 L2 : 1.022.224.00  
 L3 : 1.022.217.00  
 L4 : 1.022.202.00



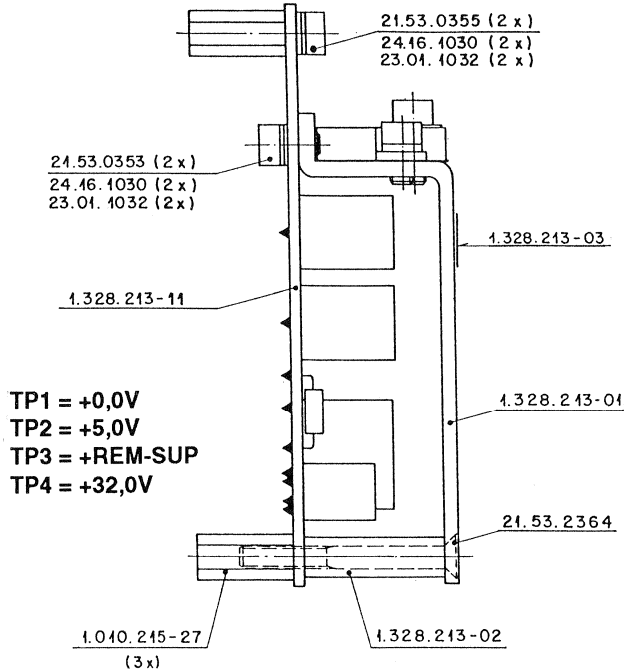
TP1 = +0,0V  
 TP2 = +5,0V  
 TP3 = +REM-SU  
 TP4 = +32,0V

24.10.85 CHE	. . . . .	. . . . .	. . . . .	. . . . .
	A820/A812			PAGE 1 OF 1
STUDER	STABILIZER BOARD	SC	1.328.213.81	

**REMOTE CONTROL CABINET (SERIAL) 1.328.210.81**  
**REMOTE CONTROL MODULE (SERIAL) 1.328.220.81**  
 - Stabilizer PCB 1.328.213.81



Montage nach BV 632



TP1 = +0,0V  
 TP2 = +5,0V  
 TP3 = +REM-SUP  
 TP4 = +32,0V

Angebot					9
Ausgabe					2
Datum	24.10.91	Gez.	Gepr.	Ges.	0
Kopie für:					

STUOER REGENSDORF ZÜRICH	Benennung	<b>STABILIZER BOARD</b>	ESE	Nummer	<b>1.328.213-81</b>
--------------------------------	-----------	-------------------------	-----	--------	---------------------

Ad	..POS..	..REF.No..	DESCRIPTION	MANUFACTURER
C.....1	59.06.0474	0.47 uF	10%, PETP	
C.....2	59.22.8470	47 uF	20%, 63V, EL	
C.....3	59.22.8470	47 uF	20%, 63V, EL	
C.....4	59.06.0474	0.47 uF	10%, PETP	
C.....5	59.06.0474	0.47 uF	10%, PETP	
C.....6	59.26.9109	1 uF	20%, 40V, SAL	
C.....7	59.22.6100	10 uF	-20%, 35V, EL	
C.....8	59.06.0332	3300 pF	10%, PETP	
C.....9	59.06.0224	0.22 uF	10%, PETP	
C.....10	59.06.0224	0.22 uF	10%, PETP	
C.....11	59.22.3471	470 uF	-20%, 10V, EL	
C.....12	59.22.3471	470 uF	-20%, 10V, EL	
C.....13	59.22.3471	470 uF	-20%, 10V, EL	
C.....14	59.22.3471	470 uF	-20%, 10V, EL	
C.....15	59.26.1220	22 uF	20%, 10V, SAL	
C.....16	59.06.0104	0.1 uF	10%, 50V, PETP	
D.....1	50.04.0122	1N 4001		Mot
D.....2	50.04.1108	5.6 V	BZX83 C 5V6, BZX55 C 5V6, ZPD 5.6 Ses,ITT	Fc,ITT,Ph,Ses
D.....3	50.04.0125	1N 4448		Fc,ITT,Ph,Ses
D.....4	50.04.0125	1N 4448		Fc,ITT,Ph,Ses
D.....5	50.04.0122	1N 4001		Mot
D.....6	50.04.0517	BYV32-200		Mot,Ph
IC.....1	50.05.0279	SG 35248N		SG
IC.....2	50.10.0104	LM 317I	LM 317 SP	Tho,Mot,NS,TI
J.....1	00.00.0000		see note 1	
L.....1	1.022.252.00	0.32 mH	Filter Coil	St
L.....2	1.022.224.00		Power Supply Transformer	St
L.....3	1.022.217.00	46 uH	HF-Coil, 5A	St
L.....4	1.022.202.00	16.9 mH	Filter Coil	St
Q.....1	50.03.0517	2 SC 3012	NPN	NEC
Q.....2	50.03.0551	BC 639	NPN	Mot,Ph
Q.....3	50.99.0106	T 2800	400V, 8A, Triac	Ph

Ad	..POS..	..REF.No..	DESCRIPTION	MANUFACTURER
R.....1	57.92.1331		PTC	see note 2
R.....2	57.11.3102		1 kOhm	1%
R.....3	57.11.3272		2.7 kOhm	1%
R.....4	57.11.3102		1 kOhm	1%
R.....5	57.11.3181		180 Ohm	1%
R.....6	57.11.3390		39 Ohm	1%
R.....7	57.11.3103		10 kOhm	1%
R.....8	57.11.3512		5.1 kOhm	1%
R.....9	57.11.3472		4.7 kOhm	1%
R.....10	57.11.3432		4.3 kOhm	1%
R.....11	57.11.3472		4.7 kOhm	1%
R.....12	57.11.3472		4.7 kOhm	1%
R.....13	57.11.3472		4.7 kOhm	1%
R.....14	57.11.3223		22 kOhm	1%
R.....15	57.11.3105		1 MOhm	1%
TP.....1	54.02.0320		Test Point	
TP.....2	54.02.0320		Test Point	
TP.....3	54.02.0320		Test Point	
TP.....4	54.02.0320		Test Point	
TP.....5	54.02.0320		Test Point	

EL=Electrolytic, SAL=Solid Aluminium, PEP=Polyester

MANUFACTURERS: Fc=Fairchild, ITT=Intermetall, Mot=Motorola, NEC=Nippon Electric Corp., NS=National Semiconductors, Ph=Philips, Ses=Sescossem, SG=Silicon General, St=Studer Tho=Thomson, TI=Texas Instruments

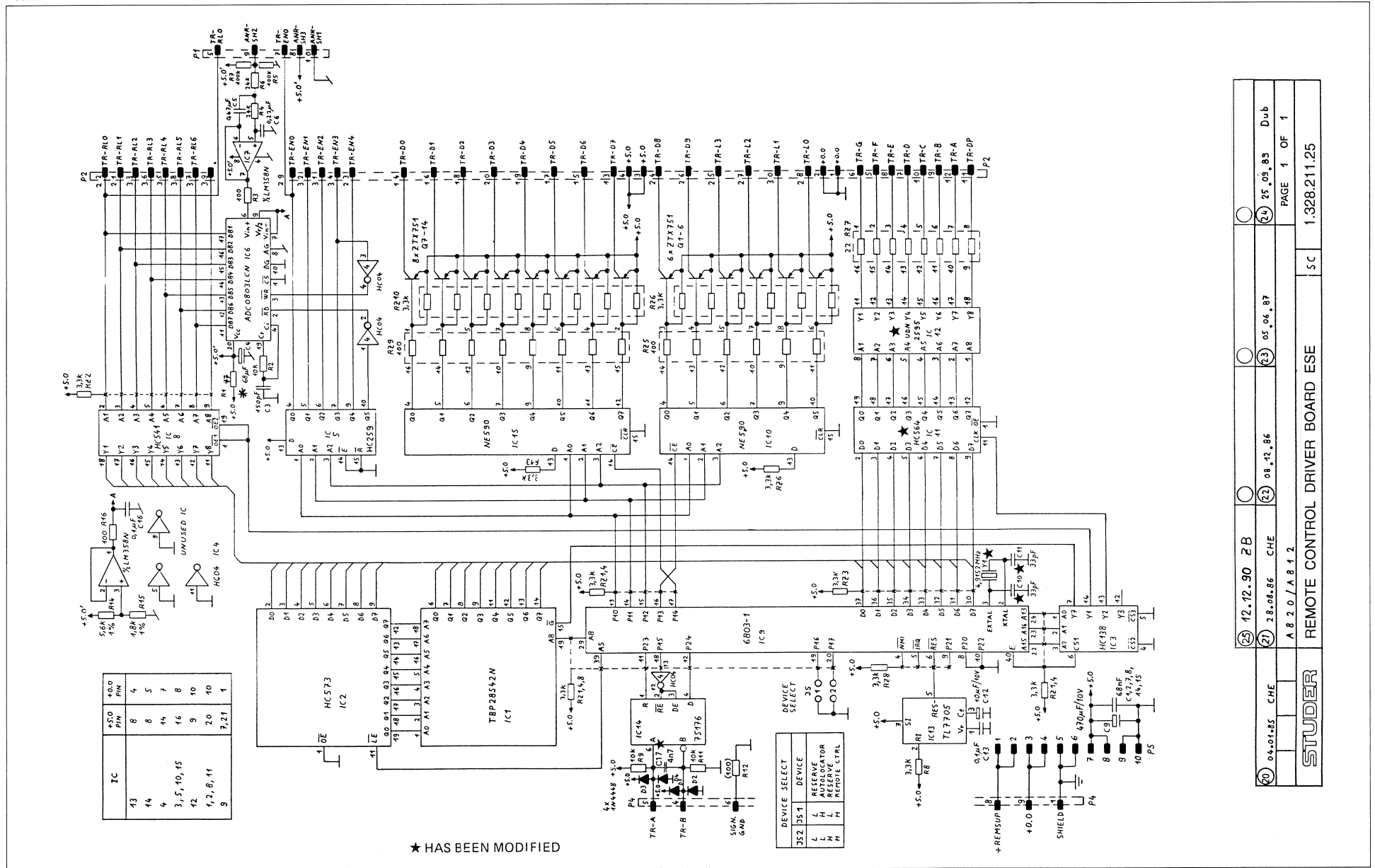
Note 1 - Connector: 10 pieces Studer Nr.53.03.0218

Note 2 - PTC Thermistor: R @ 25 degree Celsius = 4.7 Ohm  
 I @ 55 degree Celsius = 330 mA

Philips Nr.2322 663 13311

1.328.213.81 STABILIZER BOARD B091/10/2400

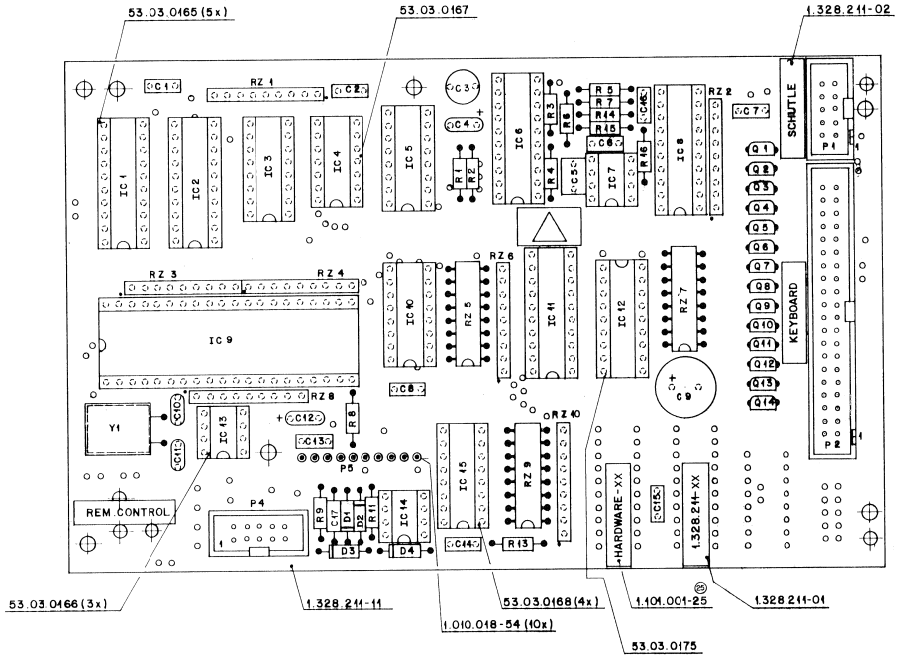
REMOTE CONTROL CABINET (SERIAL) 1.328.210.81  
 REMOTE CONTROL MODULE (SERIAL) 1.328.220.81  
 - Remote Control Driver PCB 1.328.211.25



25	12.12.90	Z B	63	05.06.87	Dub
26	06.01.85	CHE	27	28.06.86	CHE
A B 2.0 / A B 1.2					
<b>STUDER</b>					
REMOTE CONTROL DRIVER BOARD ESE					
					SC
					PAGE 1 OF 1
					1.328.211.25



**REMOTE CONTROL CABINET (SERIAL) 1.328.210.81**  
**REMOTE CONTROL MODULE (SERIAL) 1.328.220.81**  
 - Remote Control Driver PCB 1.328.211.25

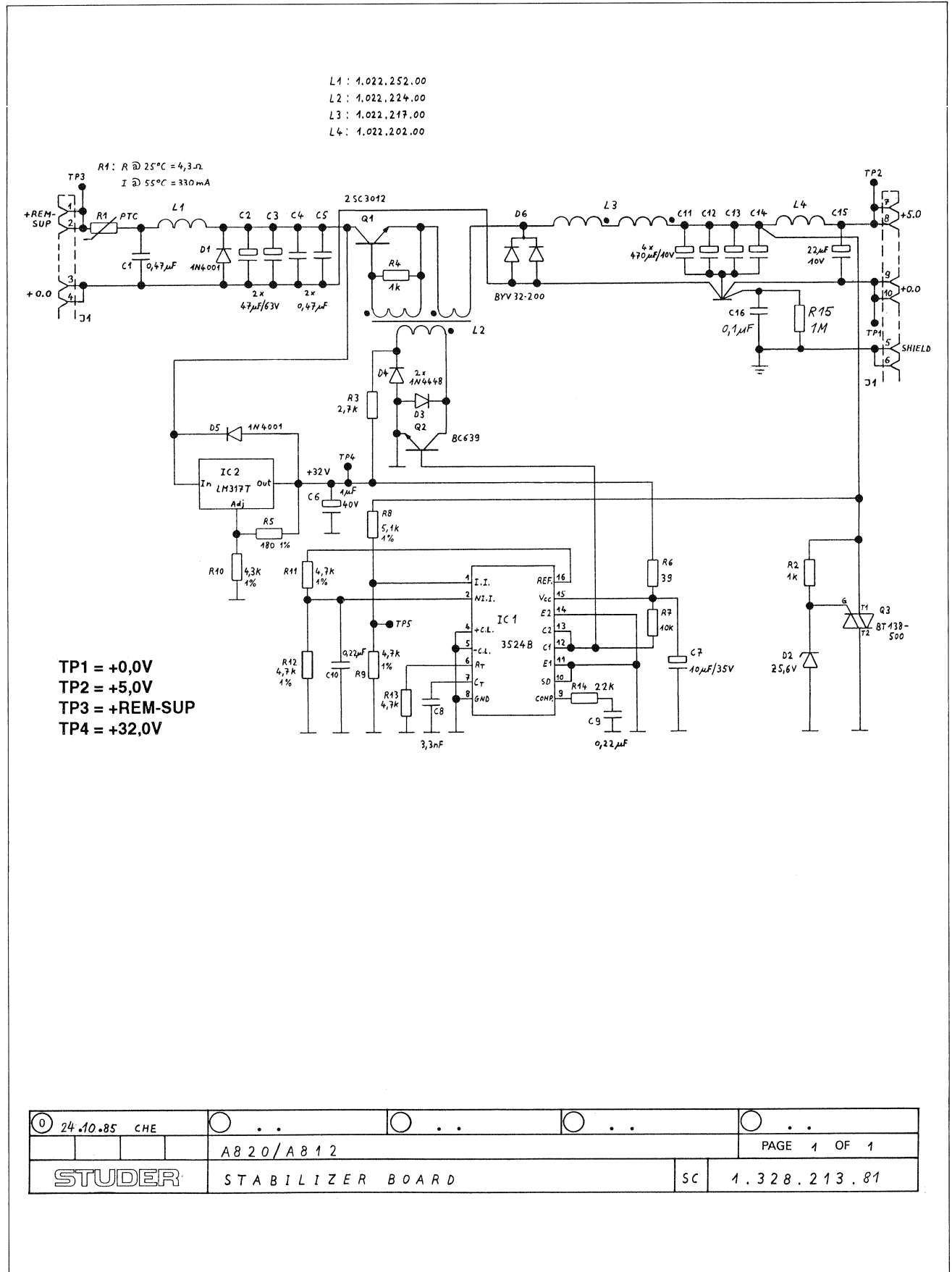


STÜCKER	REMOBOD	ZÜNDCH	REVISION	DRIVER BOARD ESE	1.328.211.25
12.12.90	25.9.89	5.6.87	8.12.86	1.12.86	2.5.88
10	11	12	13	14	15
16	17	18	19	20	21
22	23	24	25	26	27
28	29	30	31	32	33
34	35	36	37	38	39
40	41	42	43	44	45
46	47	48	49	50	51
52	53	54	55	56	57
58	59	60	61	62	63
64	65	66	67	68	69
70	71	72	73	74	75
76	77	78	79	80	81
82	83	84	85	86	87
88	89	90	91	92	93
94	95	96	97	98	99
100	101	102	103	104	105

Ad	..POS..	..REF.No..	DESCRIPTION	MANUFACTURER
20	C....1	59.06.0683	68 nF	10%, 63V, PETP
20	C....2	59.06.0683	68 nF	10%, 63V, PETP
20	C....3	59.06.2151	150 pF	2.5%, 30V, PP
20	C....4	59.26.0680	68 uF	20%, 6.3V, Sa1
20	C....5	59.06.0474	470 nF	10%, 63V, PETP
20	C....6	59.06.0224	220 nF	10%, 63V, PETP
20	C....7	59.06.0683	68 nF	10%, 63V, PETP
20	C....8	59.06.0683	68 nF	10%, 63V, PETP
20	C....9	59.22.3471	470 uF	-20%, 10V, EI
20	C....10	59.34.2220	22 pF	5%, N150, Car
21	C....10	59.34.2330	33 pF	5%, N150, Car
20	C....11	59.34.2220	22 pF	5%, N150, Car
21	C....11	59.34.2330	33 pF	5%, N150, Car
20	C....12	59.26.1100	10 uF	20%, 10V, Sa1
20	C....13	59.06.0104	100 nF	10%, 63V, PETP
20	C....14	59.06.0683	68 nF	10%, 63V, PETP
20	C....15	59.06.0683	68 nF	10%, 63V, PETP
20	C....16	59.06.0104	100 nF	10%, 63V, PETP
24	C....17	59.03.0472	4.7 nF	10%, 63V, PETP
20	C....1	50.04.0125	IN 4448	Fc,ITT,Ph,Ses,Tf
20	C....2	50.04.0125	IN 4448	Fc,ITT,Ph,Ses,Tf
20	C....3	50.04.0125	IN 4448	Fc,ITT,Ph,Ses,Tf
20	C....4	50.04.0125	IN 4448	Fc,ITT,Ph,Ses,Tf
IC....1	50.14.0120	TBP28542N		TI
20	IC....1	1.328.999.20	Software	13/85
22	IC....1	1.328.999.21	Software	50/86
23	IC....1	1.328.999.22	Software	29/87
20	IC....2	50.17.1573	74 HC 573	Mot,NS,Ph,RCA,SGS,TI,To
20	IC....3	50.17.1573	74 HC 573	Mot,NS,Ph,RCA,SGS,TI,To
20	IC....4	50.17.1004	74 HC 04	.. 74 HC 04 ..
20	IC....5	50.17.1259	74 HC 259	.. 74 HC 259 ..
20	IC....6	50.05.0286	LM 358 N	LM 358 N
20	IC....7	50.17.1541	74 HC 541	.. 74 HC 541 ..
20	IC....8	50.16.0107	HC 6039P-1	Hi,Mot
20	IC....9	50.15.0102	NE 590 N	NE 590 N
20	IC....11	50.17.1574	74 HC 574	.. 74 HC 574 ..
21	IC....11	50.17.1564	74 HC 564	.. 74 HC 564 ..
20	IC....12	50.15.0113	SN 75498 N	TI
21	IC....12	50.15.0113	U0N-2555A	Sp
20	IC....13	50.11.0122	TL705ACP	TI
20	IC....14	50.15.0115	SN 75176AP	NS,TI
20	IC....15	50.15.0102	NE 590 N	NE 590 N
20	IC....16	not used	not used	not used
20	IC....17	not used	not used	not used
20	P....1	see note 2	see note 2	see note 2
20	P....2	see note 3	see note 3	see note 3
20	P....3	not used	not used	not used
20	P....4	see note 2	see note 2	see note 2
20	P....5	see note 4	see note 4	see note 4
20	Q....1	50.03.0352	ZTX 751 S	Fe
20	Q....2	50.03.0352	ZTX 751 S	Fe
20	Q....3	50.03.0352	ZTX 751 S	Fe
20	Q....4	50.03.0352	ZTX 751 S	Fe
20	Q....5	50.03.0352	ZTX 751 S	Fe
20	Q....6	50.03.0352	ZTX 751 S	Fe
20	Q....7	50.03.0352	ZTX 751 S	Fe
20	Q....8	50.03.0352	ZTX 751 S	Fe
20	Q....9	50.03.0352	ZTX 751 S	Fe
20	Q....10	50.03.0352	ZTX 751 S	Fe
20	Q....11	50.03.0352	ZTX 751 S	Fe
20	Q....12	50.03.0352	ZTX 751 S	Fe
20	Q....13	50.03.0352	ZTX 751 S	Fe
20	Q....14	50.03.0352	ZTX 751 S	Fe
20	R....1	57.11.3100	10 Ohm	2%
25	R....1	57.11.3470	47 Ohm	2%
20	R....2	57.11.3103	10 Ohm	2%
20	R....3	57.11.3101	100 Ohm	2%
20	R....4	57.11.3243	24 kOhm	1%
20	R....5	57.11.3104	100 Ohm	2%
20	R....6	57.11.3243	24 kOhm	1%
20	R....7	57.11.3104	100 Ohm	2%
20	R....8	57.11.3332	3.3 kOhm	2%
20	R....9	57.11.3103	10 Ohm	2%
20	R....10	57.11.3102	1 kOhm	2%
24	R....10	not used	replaced by C17	
20	R....11	57.11.3103	10 kOhm	2%
20	R....12	not used	not used	
20	R....13	57.11.3332	3.3 kOhm	2%
20	R....14	57.11.3562	5.6 kOhm	1%
20	R....15	57.11.3182	1.8 kOhm	1%
20	R....16	57.11.3101	100 Ohm	2%
20	KZ....1	57.88.4332	Network, 8 * 3.3 kOhm, 5%, single line	
20	KZ....2	57.88.4332	Network, 8 * 3.3 kOhm, 5%, single line	
20	KZ....3	57.88.4332	Network, 8 * 3.3 kOhm, 5%, single line	
20	KZ....4	57.88.4332	Network, 8 * 3.3 kOhm, 5%, single line	
20	KZ....5	57.88.3101	Network, 8 * 100 Ohm, 2%, DIL 16	
20	KZ....6	57.88.4332	Network, 8 * 3.3 kOhm, 5%, single line	
20	KZ....7	57.88.322C	Network, 8 * 22 Ohm, 2%, DIL 16	
20	KZ....8	57.88.4332	Network, 8 * 3.3 kOhm, 5%, single line	
20	KZ....9	57.88.3101	Network, 8 * 100 Ohm, 2%, DIL 16	
20	KZ....10	57.88.4332	Network, 8 * 3.3 kOhm, 5%, single line	
20	KZ....11	not used	not used	
20	*....1	89.01.0553	4.9152 Mhz +100 ppm, Nymph Nr. TD 18/NMP 049	

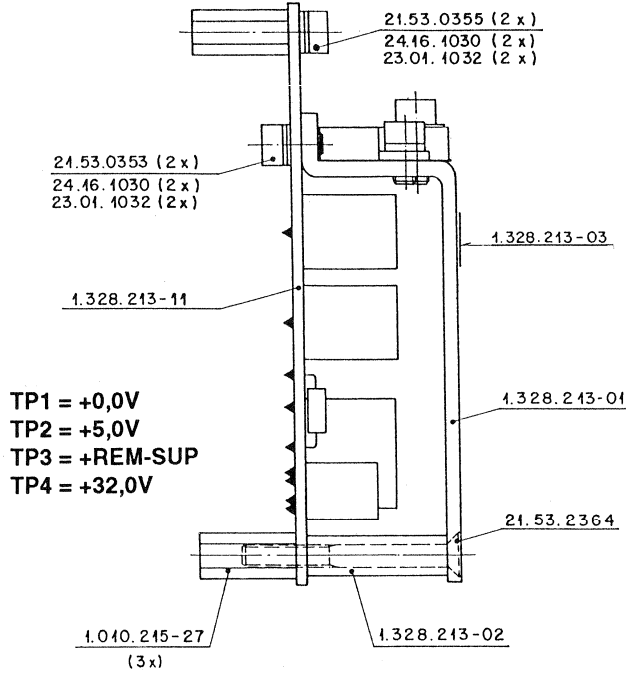
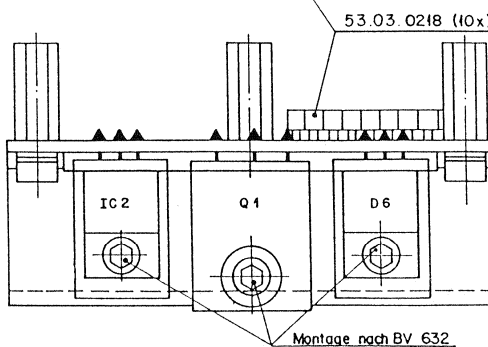
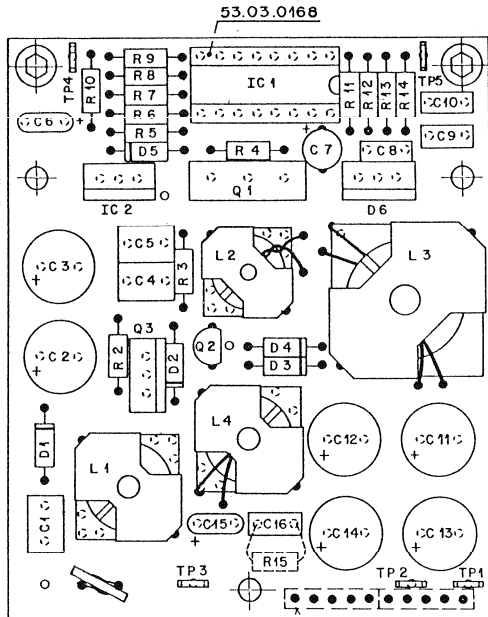
Ad	..POS..	..REF.No..	DESCRIPTION	MANUFACTURER
21	Y....1	89.01.0560	HC-49/V 4.9152 Mhz, +20ppm Quarz AG,ITT,Saronix	
(20)	01.02.85	PCB lay-out -11.		
(21)	01.12.86	IC12-SN75498N delivered for spare purpose only, new devices IC11 and IC12.		
		VI, C10, C11 improved accuracy of quartz frequency.		
(22)	08.12.86	Extended Autolocator key board.		
(23)	05.06.87	Software 29/87.		
(24)	25.09.89	Improved noise suppression on differential line.		
(25)	12.12.90	Ripple on AD-converter supply reduced.		
Note 2	Connector: 10 Contacts	Studer Nr. 54.14.2001 Yamaichi Nr. FAP-10-08/4 Burndy Nr. BPH 7 B 10 800 GS		
Note 3	Connector: 40 Contacts	Studer Nr. 54.14.2004 Yamaichi Nr. FAP-40-08/4 Burndy Nr. BPH 9 B 40 800 GS		
Note 4	Connector: 10 Pieces	Studer Nr. 1.010.018.54		
Cor=Ceramic, El=Electrolytic, PETP=Polyester Film, PP=Polypropylen, Sa1=Solid Aluminium.				
MANUFACTURERS: Fc=Fairchild, Fe=Ferranti, Hi=hitachi, Is=Intersil, ITT=Intermettal, Mot=Motorola, NS=National Semiconductors, Ph=Philips, RCA=RCA Corporation, Ses=Seiscosm, SGS=SGS/Ates, Sig=Signetics, Sp=Sprague, St=Studer, Tf=Telefunken, TI=Texas Instruments, To= Toshiba.				
1.328.211.00	REMOTE CONTROL DRIVER BOARD	BD 85/02/0100		
1.328.211.00	REMOTE CONTROL DRIVER BOARD	BD 85/02/0120		
1.328.211.00	REMOTE CONTROL DRIVER BOARD	BD 86/12/0121		
1.328.211.00	REMOTE CONTROL DRIVER BOARD	BD 86/12/0822		
1.328.211.00	REMOTE CONTROL DRIVER BOARD	BD 87/04/0523		
1.328.211.00	REMOTE CONTROL DRIVER BOARD	VF 89/09/2524		
1.328.211.00	REMOTE CONTROL DRIVER BOARD	Z8 90/12/1225		
END				

**AUTOLOCATOR MODULE 1.328.230.82**  
**AUTOLOCATOR CABINET 1.328.240.82**  
 - Stabilizer Board 1.328.213.81



24.10.85	CHE						
A820/A812				PAGE 1 OF 1			
STUDER		STABILIZER BOARD			SC	1.328.213.81	

**AUTOLOCATOR MODULE 1.328.230.82**  
**AUTOLOCATOR CABINET 1.328.240.82**  
 - Stabilizer Board 1.328.213.81



TP1 = +0,0V  
 TP2 = +5,0V  
 TP3 = +REM-SUP  
 TP4 = +32,0V

Änderung					③
					②
					①
Ausgabe	24.10.91	7/4			④
Datum		Gez.	Gepr.	Ges.	Index

STUDER REGENSDORF ZÜRICH	Benennung:	STABILIZER BOARD ESE	Nummer:	1.328.213-81
				Kopie für:

Ad	..POS..	..REF.No..	DESCRIPTION	MANUFACTURER
C.....1	59.06.0474	0.47 uF	10%, PETP	
C.....2	59.22.8470	47 uF	20%, 63V, EL	
C.....3	59.22.8470	47 uF	20%, 63V, EL	
C.....4	59.06.0474	0.47 uF	10%, PETP	
C.....5	59.06.0474	0.47 uF	10%, PETP	
C.....6	59.26.9109	1 uF	20%, 40V, SAL	
C.....7	59.22.6100	10 uF	-20%, 35V, EL	
C.....8	59.06.0332	3300 pF	10%, PETP	
C.....9	59.06.0224	0.22 uF	10%, PETP	
C.....10	59.06.0224	0.22 uF	10%, PETP	
C.....11	59.22.3471	470 uF	-20%, 10V, EL	
C.....12	59.22.3471	470 uF	-20%, 10V, EL	
C.....13	59.22.3471	470 uF	-20%, 10V, EL	
C.....14	59.22.3471	470 uF	-20%, 10V, EL	
C.....15	59.26.1220	22 uF	20%, 10V, SAL	
C.....16	59.06.0104	0.1 uF	10%, 50V, PETP	
D.....1	50.04.0122	1N 4001		Mot
D.....2	50.04.1108	5.6 V	BZX83 C 5V6, BZX55 C 5V6, ZPD 5.6 V	Ses,ITT
D.....3	50.04.0125	1N 4448		Fc,ITT,Ph,Ses
D.....4	50.04.0125	1N 4448		Fc,ITT,Ph,Ses
D.....5	50.04.0122	1N 4001		Mot
D.....6	50.04.0517	BYV32-200		Mot,Ph
IC.....1	50.05.0279	SG 3524BN		SG
IC.....2	50.10.0104	LM 317T	LM 317 SP	Tho,Mot,NS,TI
J.....1	00.00.0000		see note 1	
L.....1	1.022.252.00	0.32 mH	Filter Coil	St
L.....2	1.022.224.00		Power Supply Transformer	St
L.....3	1.022.217.00	46 uH	HF-Coil, 5A	St
L.....4	1.022.202.00	16.9 mH	Filter Coil	St
Q.....1	50.03.0517	2 SC 3012	NPN	NEC
Q.....2	50.03.0551	BC 639	NPN	Mot,Ph
Q.....3	50.99.0106	T 2800	400V, 8A, Triac	Ph

Ad	..POS..	..REF.No..	DESCRIPTION	MANUFACTURER
R.....1	57.92.1331	PTC	see note 2	Ph
R.....2	57.11.3102	1 kOhm	1%	
R.....3	57.11.3272	2.7 kOhm	1%	
R.....4	57.11.3102	1 kOhm	1%	
R.....5	57.11.3181	180 Ohm	1%	
R.....6	57.11.3390	39 Ohm	1%	
R.....7	57.11.3103	10 kOhm	1%	
R.....8	57.11.3512	5.1 kOhm	1%	
R.....9	57.11.3472	4.7 kOhm	1%	
R.....10	57.11.3432	4.3 kOhm	1%	
R.....11	57.11.3472	4.7 kOhm	1%	
R.....12	57.11.3472	4.7 kOhm	1%	
R.....13	57.11.3472	4.7 kOhm	1%	
R.....14	57.11.3223	22 kOhm	1%	
R.....15	57.11.3105	1 MOhm	1%	
TP....1	54.02.0320		Test Point	
TP....2	54.02.0320		Test Point	
TP....3	54.02.0320		Test Point	
TP....4	54.02.0320		Test Point	
TP....5	54.02.0320		Test Point	

EL=Electrolytic, SAL=Solid Aluminium, PETP=Polyester

MANUFACTURERS: Fc=Fairchild, IIT=Intermetall, Mot=Motorola, NEC=Nippon Electric Corp., NS=National Semiconductors, Ph=Philips, Ses=Sescom, SG=Silicon General, St=Studer, Tho=Thomson, TI=Texas Instruments

Note 1 - Connector: 10 pieces Studer Nr.53.03.0218

Note 2 - PTC Thermistor: R @ 25 degree Celsius = 4.7 Ohm  
 I @ 55 degree Celsius = 330 mA

Philips Nr.2322 663 13311

1.328.213.81 STABILIZER BOARD