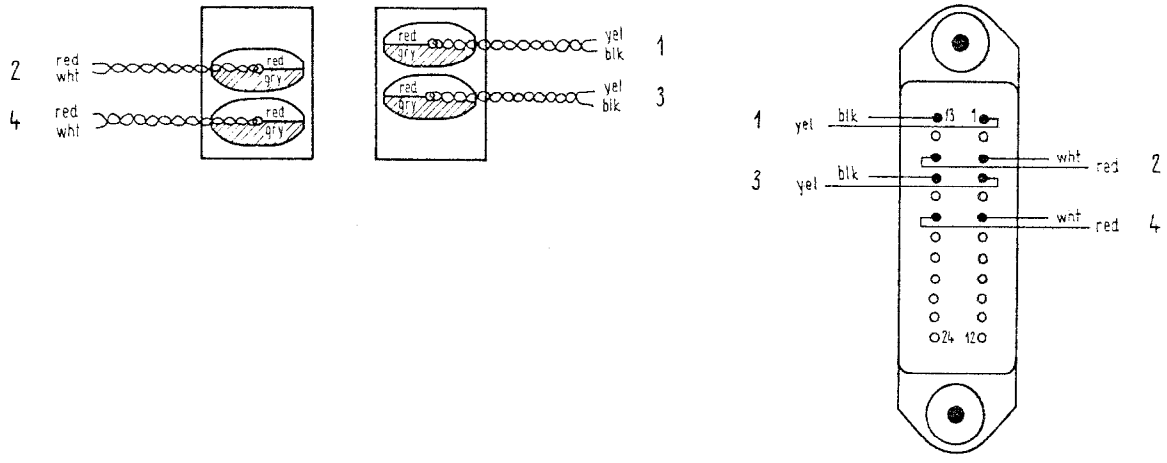
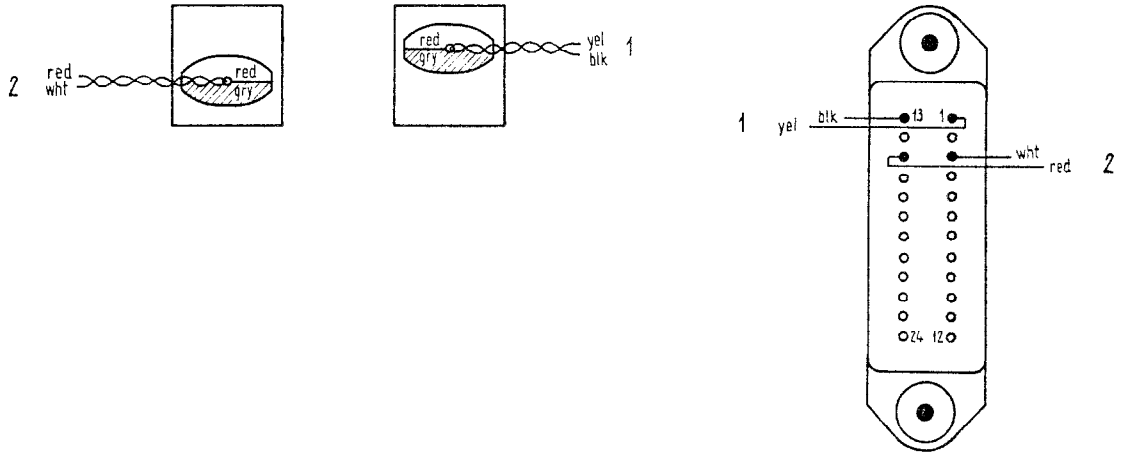
			Unspezified carbon film resistors: 1/8 W — 5%	* * Commercial types
IDENTIFI-CATION	PART NAME	TYPE / REMARKS	SPECIFICATIONS	ORDER NUMBER
R 18	Resistor	carbon film	15 k	* *
R 19	Resistor	carbon film	3,3 k	* *
R 20	Resistor	carbon film	68	* *
R 21	Resistor	carbon film	68	* *
R 22	Resistor	metal film	3,24 k — 1% —0,33 W	57.39.3241
R 23	Resistor	metal film	3,24 k — 1% —0,33 W	57.39.3241
R 24	Resistor	carbon film	47	* *
R 25	Resistor	metal film	3,24 k — 1% —0,33 W	57.39.3241
R 26	Resistor	carbon film	180 k	* *
R 27	Resistor	carbon film	180 k	* *
R 28	Resistor	carbon film	1 M	* *
R 29	Resistor	carbon film	1 M	* *
R 31	Resistor	carbon film	15 k	* *
R 32	Resistor	carbon film	3,3 k	* *
R 33	Resistor	carbon film	680	* *
R 34	Resistor	carbon film	10 k	* *
R 35	Resistor	carbon film	4,7 k	* *
R 36	Resistor	carbon film	180	* *
R 37	Resistor	carbon film	3,3 k	* *
R 38	Resistor	carbon film	3,3 k	* *
R 39	Resistor	carbon film	220	* *
R 40	Resistor	carbon film	10 k	* *
R 41	Resistor	carbon film	4,7 k	* *
R 42	Resistor	carbon film	180	* *
R 43	Resistor	carbon film	3,3 k	* *
R 44	Resistor	carbon film	3,3 k	* *
R 45	Resistor	carbon film	68	* *
R 46	Resistor	carbon film	68	* *

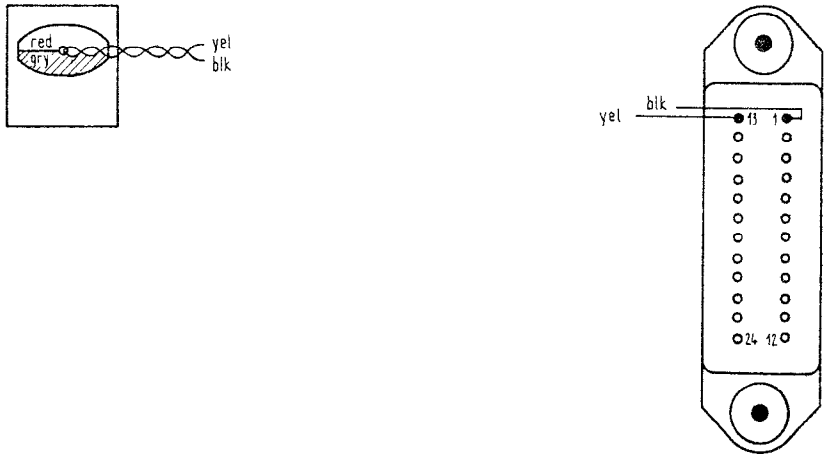
Erase head



Erase head



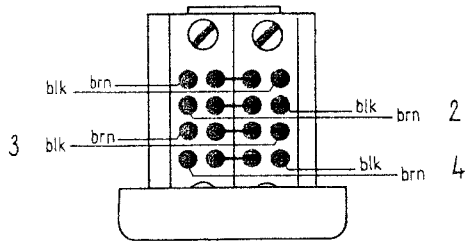
Erase head

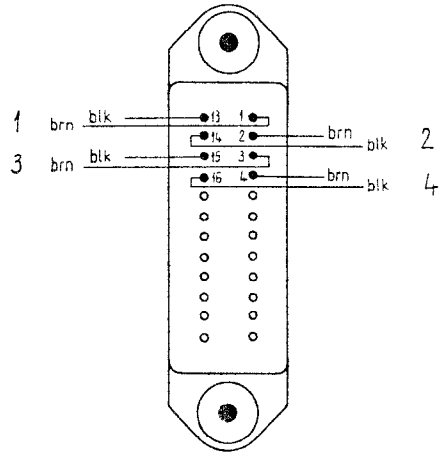


A80/VU

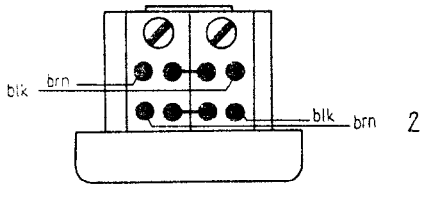
WIRING DIAGRAMS
HEAD BLOCK ASSEMBLIES

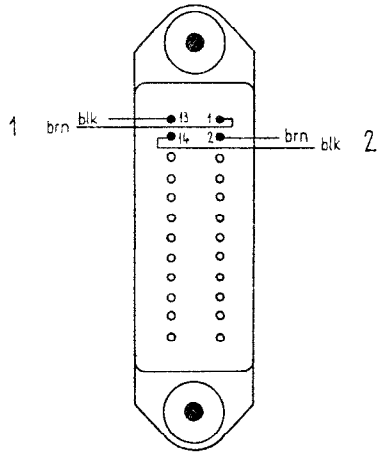
Record head



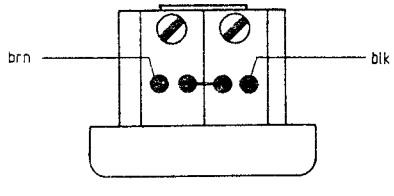


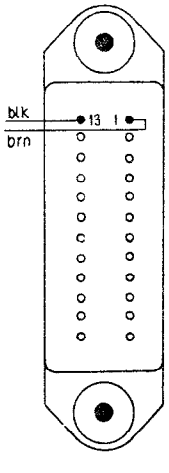
Record head



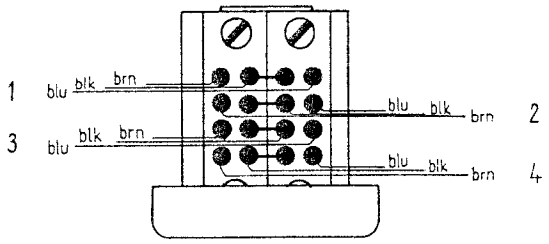


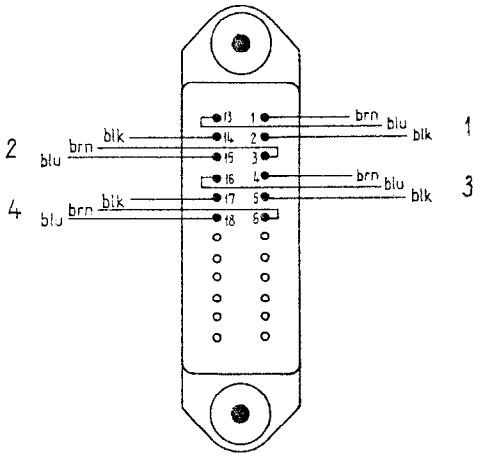
Record head





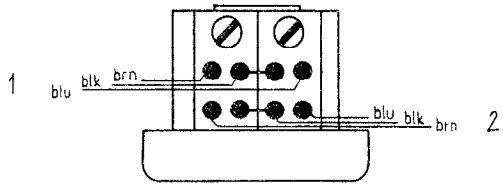
Reproduce head

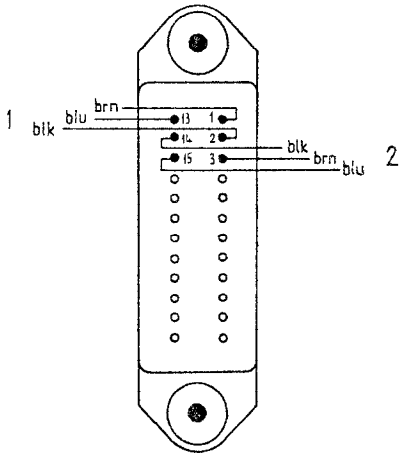




4 Channel, 1/2 inch
4 Kanal, 1/2 Zoll

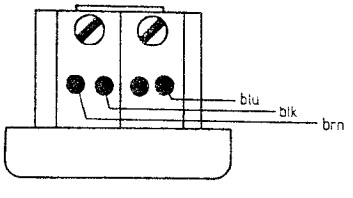
Reproduce head

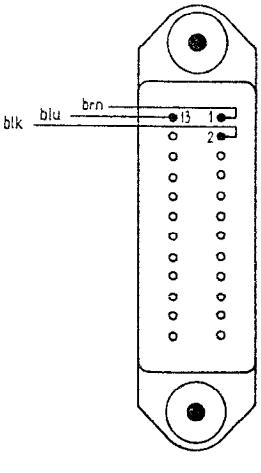




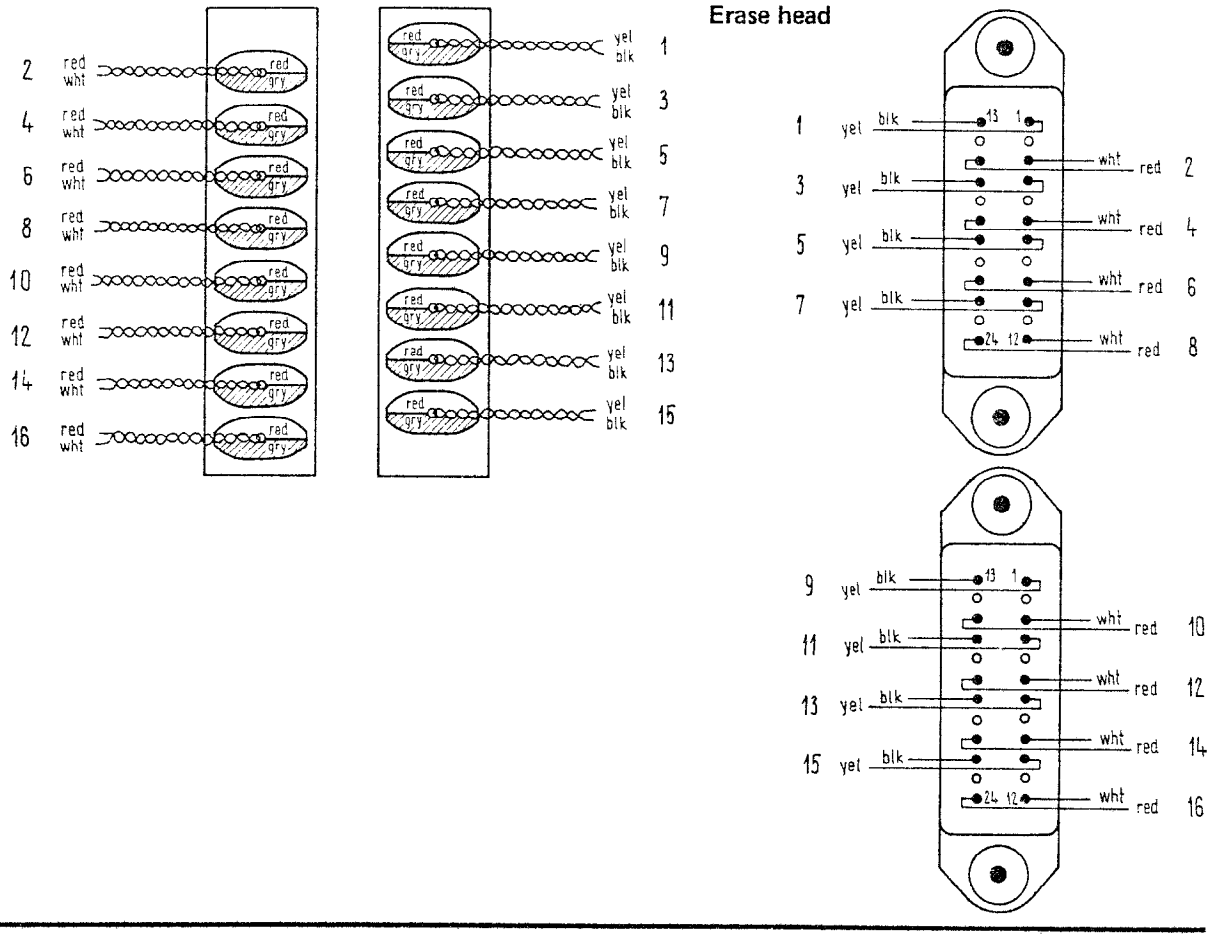
2 Channel or STEREO, 1/4 inch
2 Kanal oder STEREO, 1/4 Zoll

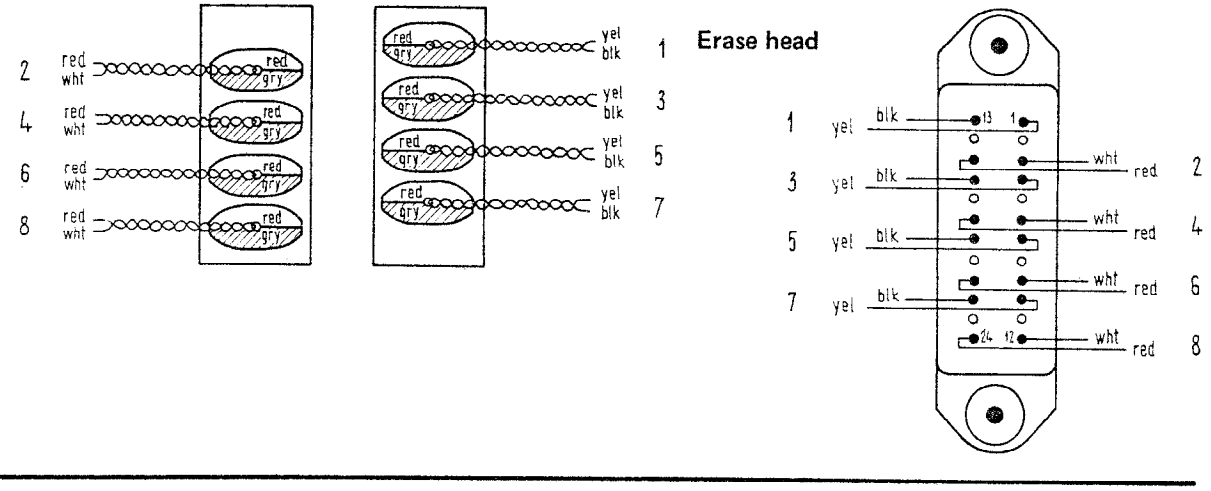
Reproduce head

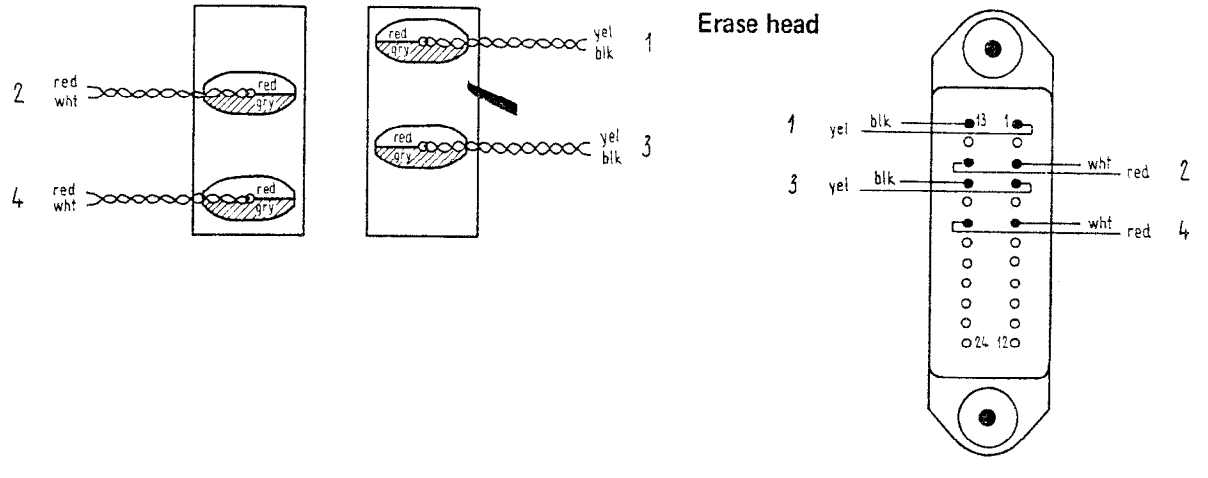




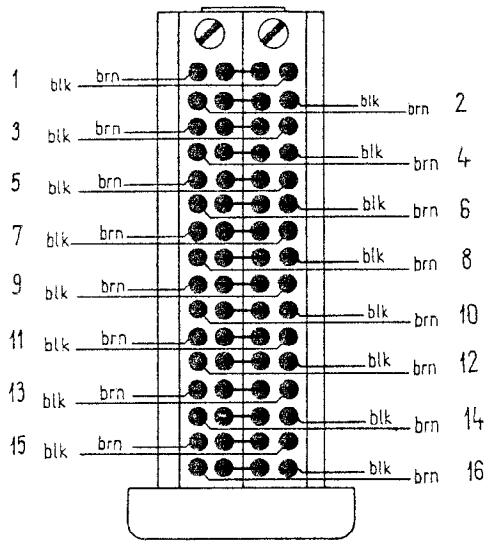
Fulltrack, 1/4 inch
Vollspur, 1/4 Zoll

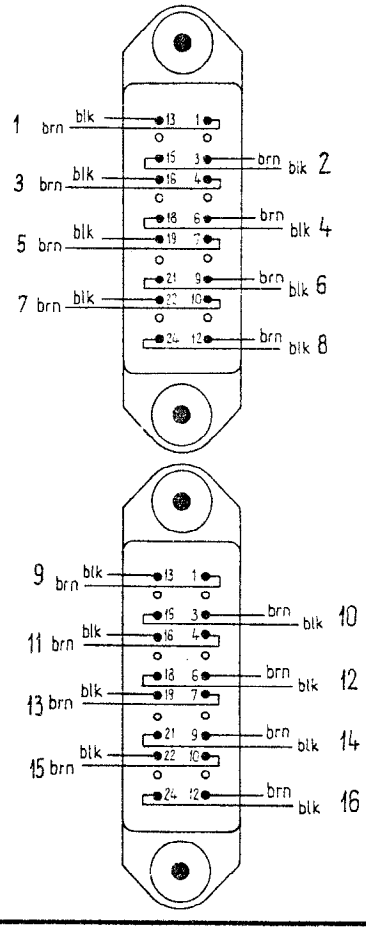

Erase head
2 red wht red gry
4 red wht red gry
6 red wht red gry
8 red wht red gry
10 red wht red gry
12 red wht red gry
14 red wht red gry
16 red wht red gry
red gry yel blk 1
red gry yel blk 3
red gry yel blk 5
red gry yel blk 7
red gry yel blk 9
red gry yel blk 11
red gry yel blk 13
red gry yel blk 15
1 yel blk 13 1
3 yel blk
5 yel blk
7 yel blk
24 12
wht red 2
wht red 4
wht red 6
wht red 8
9 yel blk 13 1
11 yel blk
13 yel blk
15 yel blk
24 12
wht red 10
wht red 12
wht red 14
wht red 16


Erase head
2 red wht red gry
4 red wht red gry
6 red wht red gry
8 red wht red gry
red gry yel blk 1
red gry yel blk 3
red gry yel blk 5
red gry yel blk 7
1 yel blk 13 1
3 yel blk
5 yel blk
7 yel blk
24 12
wht red 2
wht red 4
wht red 6
wht red 8

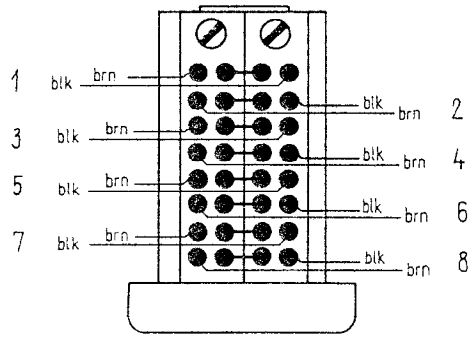

Erase head
2 red wht red gry
4 red wht red gry
red gry yel blk 1
red gry yel blk 3
1 yel blk 13 1
3 yel blk
24 12
wht red 2
wht red 4

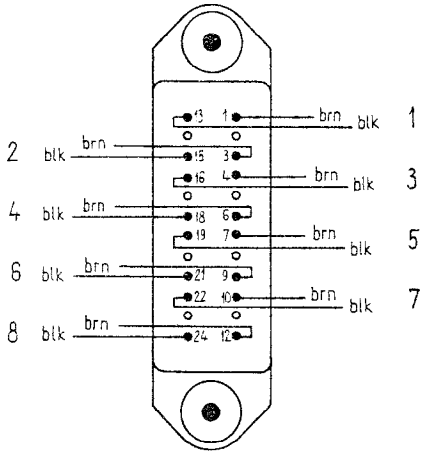
Record head



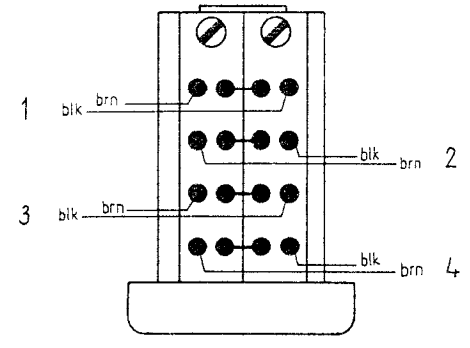


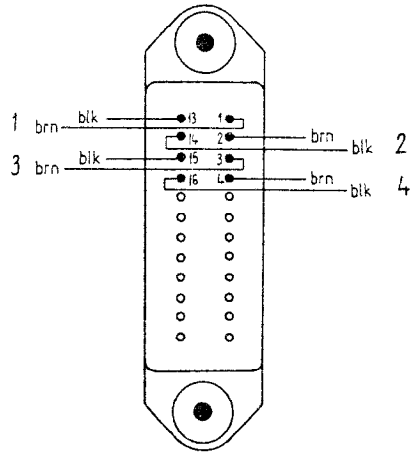
Record head

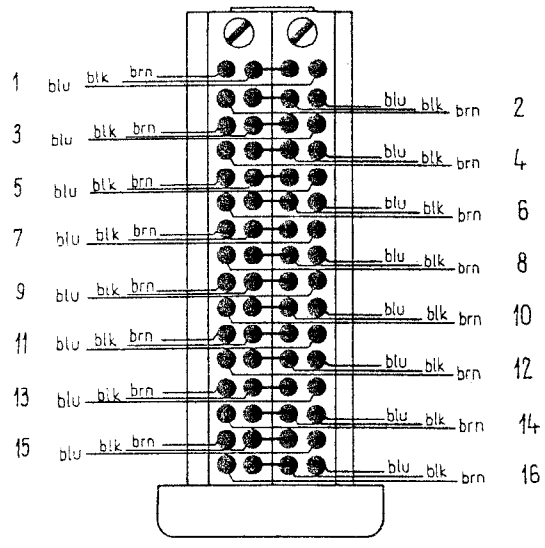




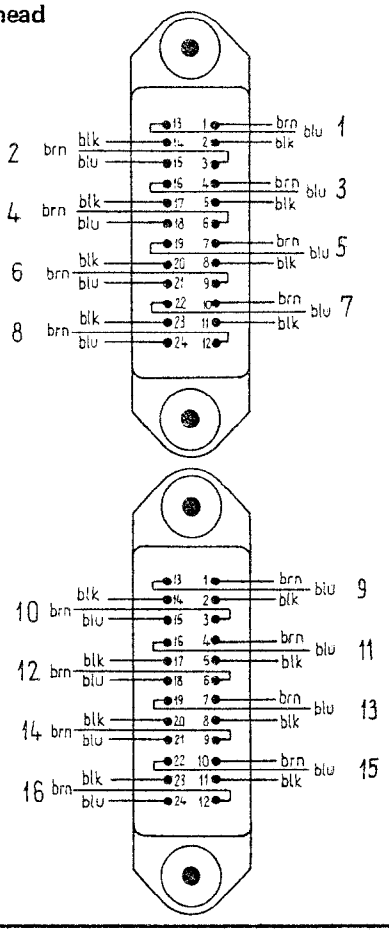
Record head



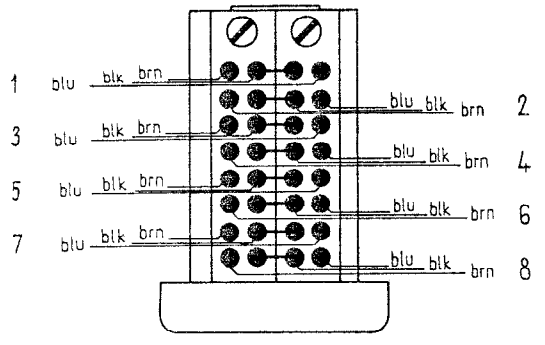




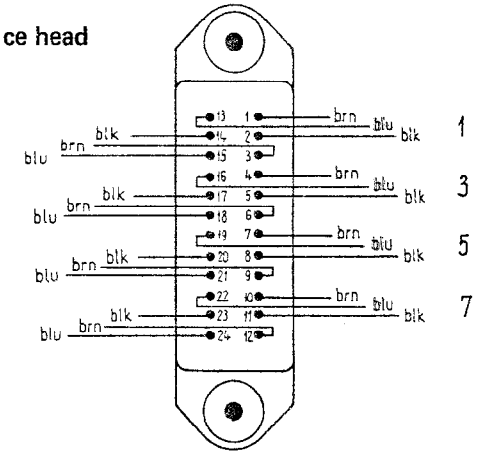
Reproduce head



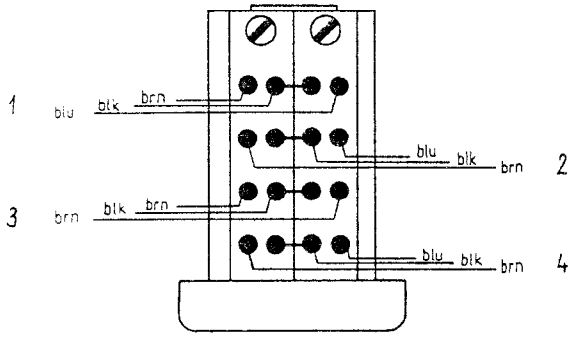
16 Channel, 2 inches
16 Kanal, 2 Zoll



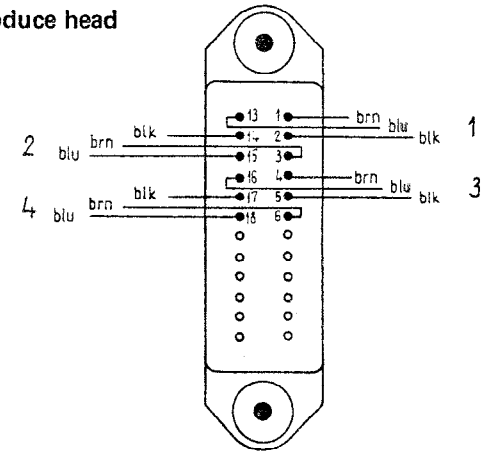
Reproduce head



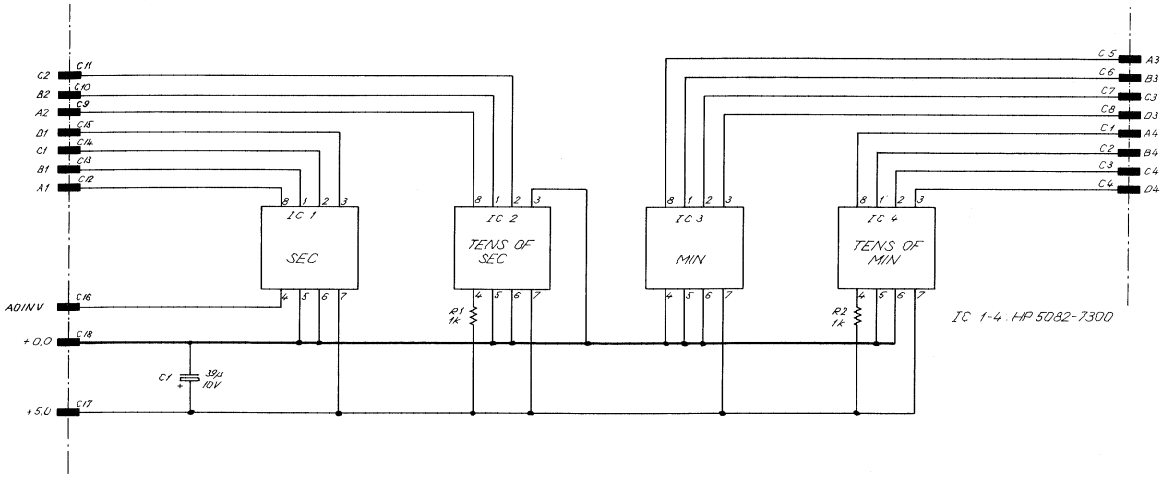
8 Channel, 1 inch
8 Kanal, 1 Zoll



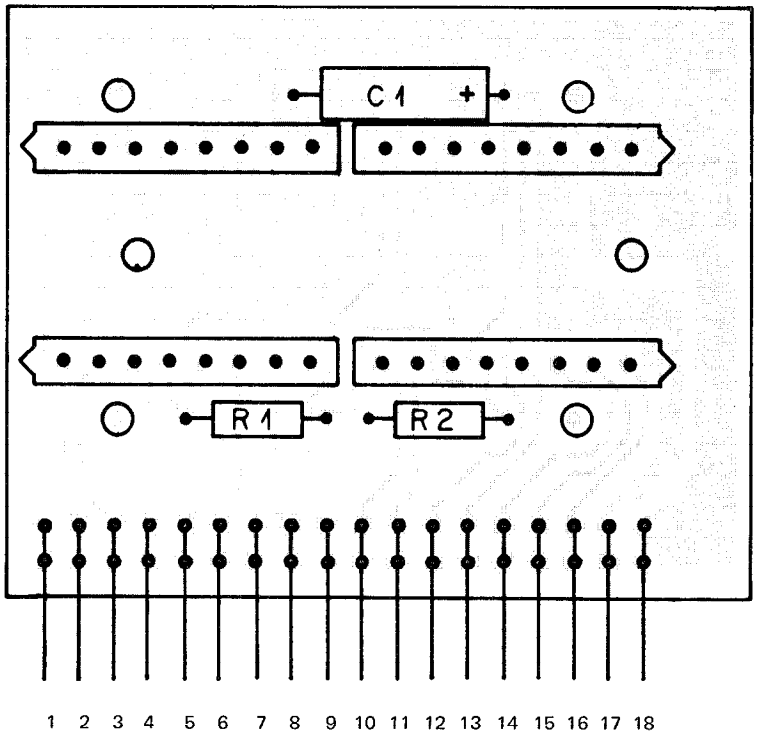
Reproduce head

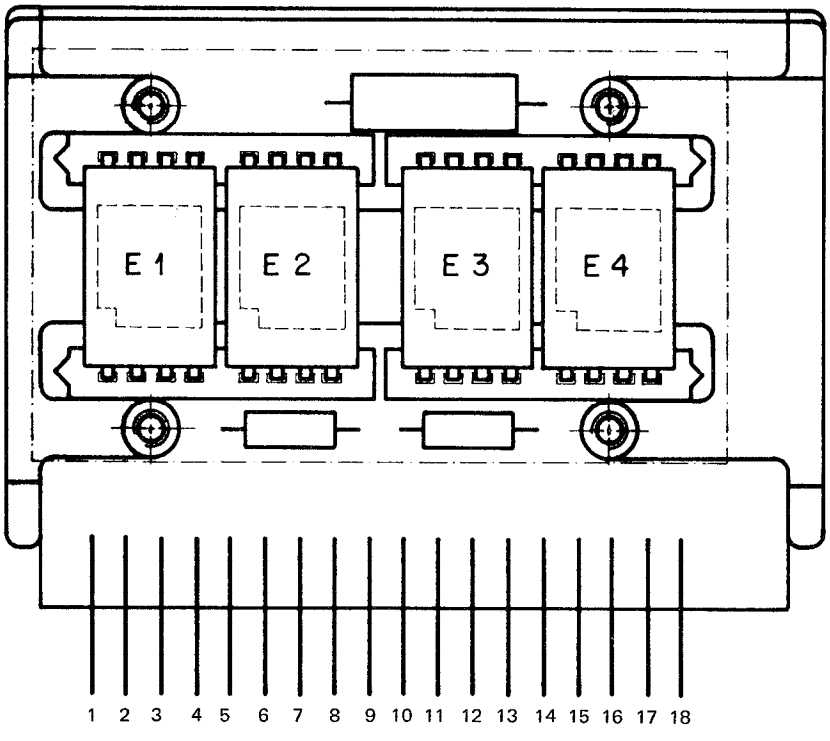


4 Channel, 1 inch
4 Kanal, 1 Zoll

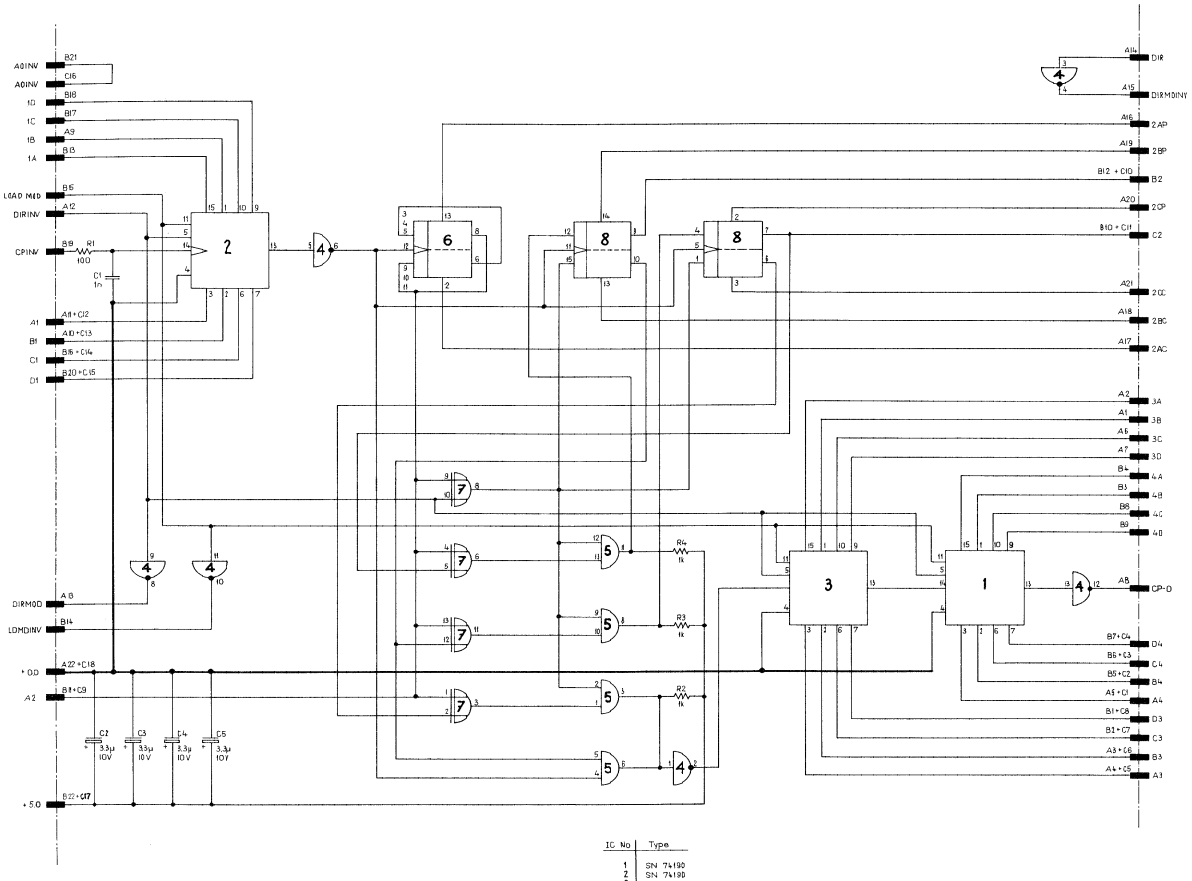


	FIRST	LAST	MISSING
C	1	1	–
E	1	4	–
R	1	2	–


C1
+
R1
R2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18


E1
E2
E3
E4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

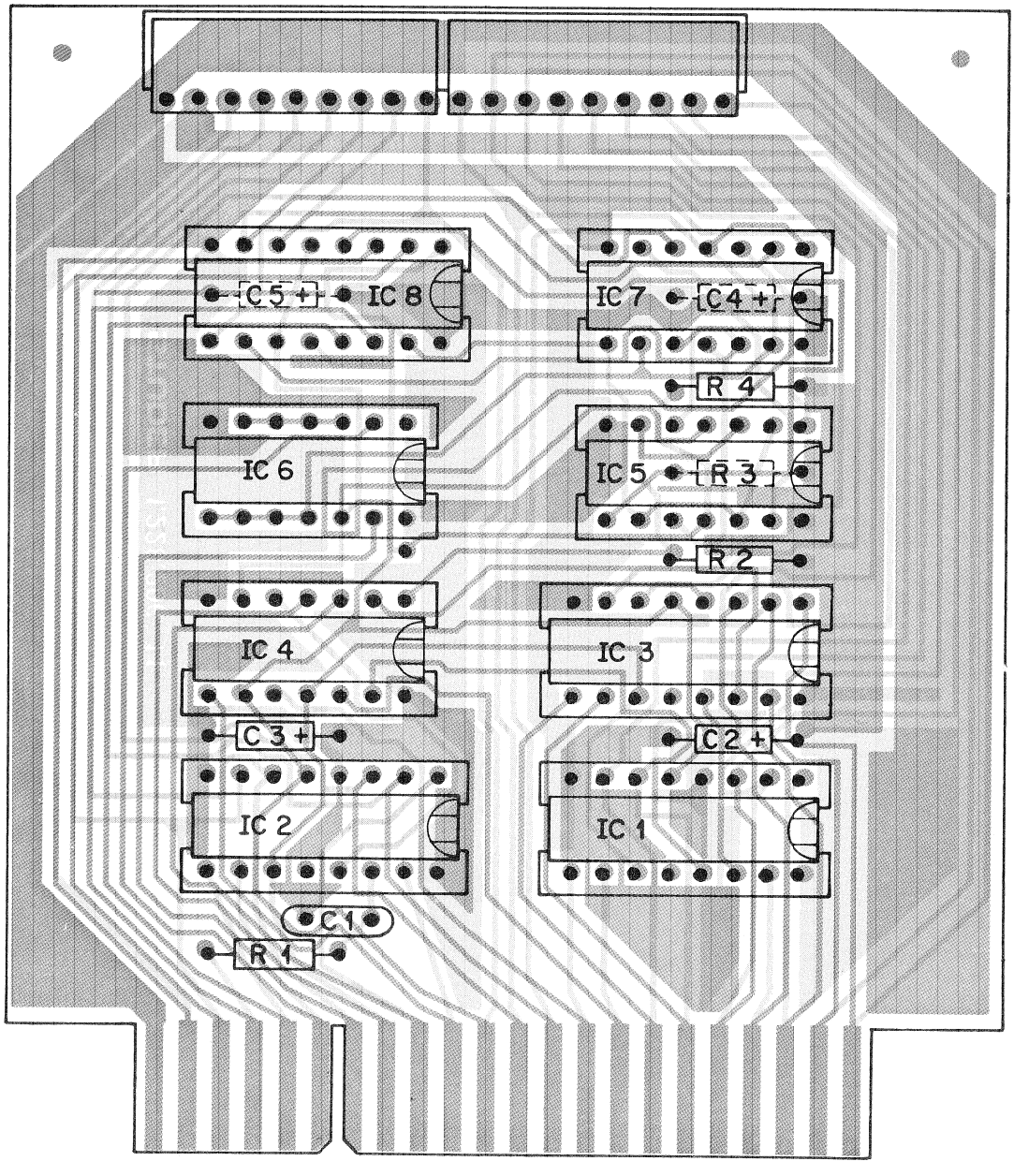
			Unspezified carbon film resistors: 1/8 W — 5%	* * Commercial types
IDENTIFI-CATION	PART NAME	TYPE / REMARKS	SPECIFICATIONS	ORDER NUMBER
	Display	Board assembled		1.228.205
C 1	Capacitor	tantalum	39 μ F — 20% — 10 V	* *
E 1	Num. Indicator	TTL		73.01.0108
E 2	Num. Indicator	TTL		73.01.0108
E 3	Num. Indicator	TTL		73.01.0108
E 4	Num. Indicator	TTL		73.01.0108
R 1	Resistor	carbon composition	1 k — 10% — 0,25 W	* *
R 2	Resistor	carbon composition	1 k — 10% — 0,25 W	* *



IC No	Type
1	SN 74190
2	SN 74190
3	SN 74190
4	SN 7404
5	SN 7403
6	SN 7472
7	SN 7486
8	SN 74111

UPIDOWN TIME COUNTER **1.228.206**

18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

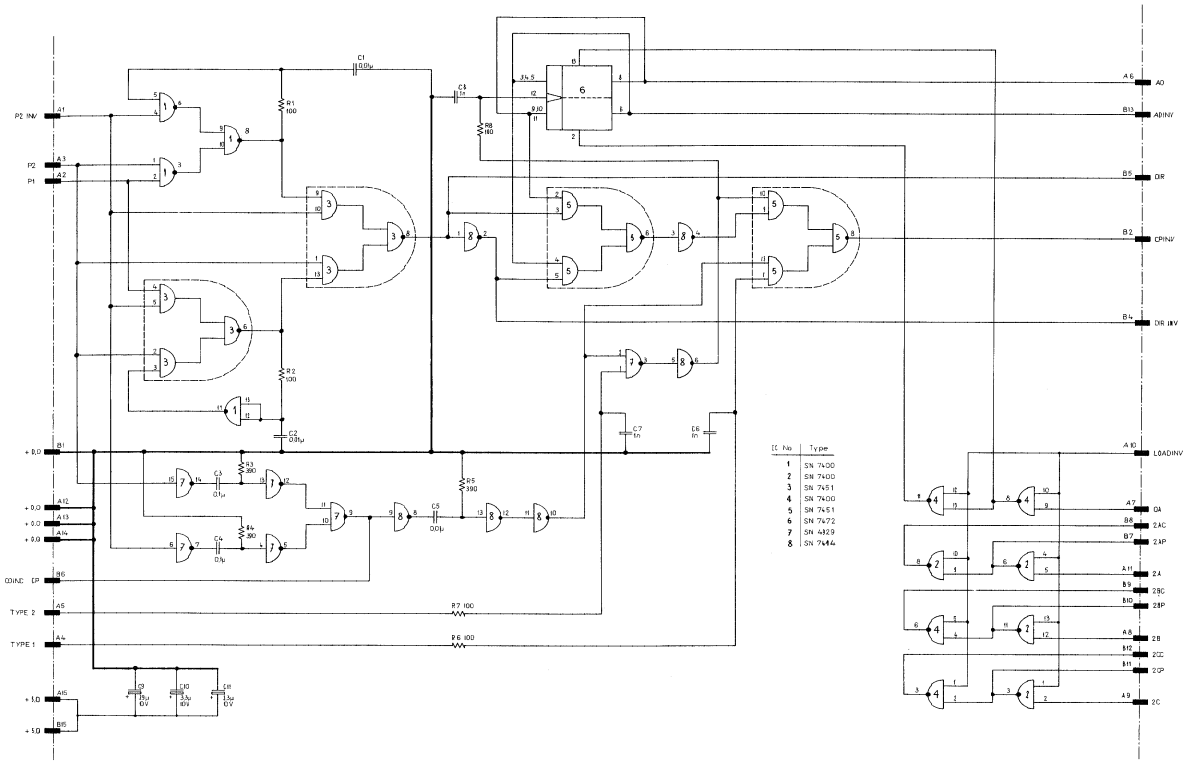


22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

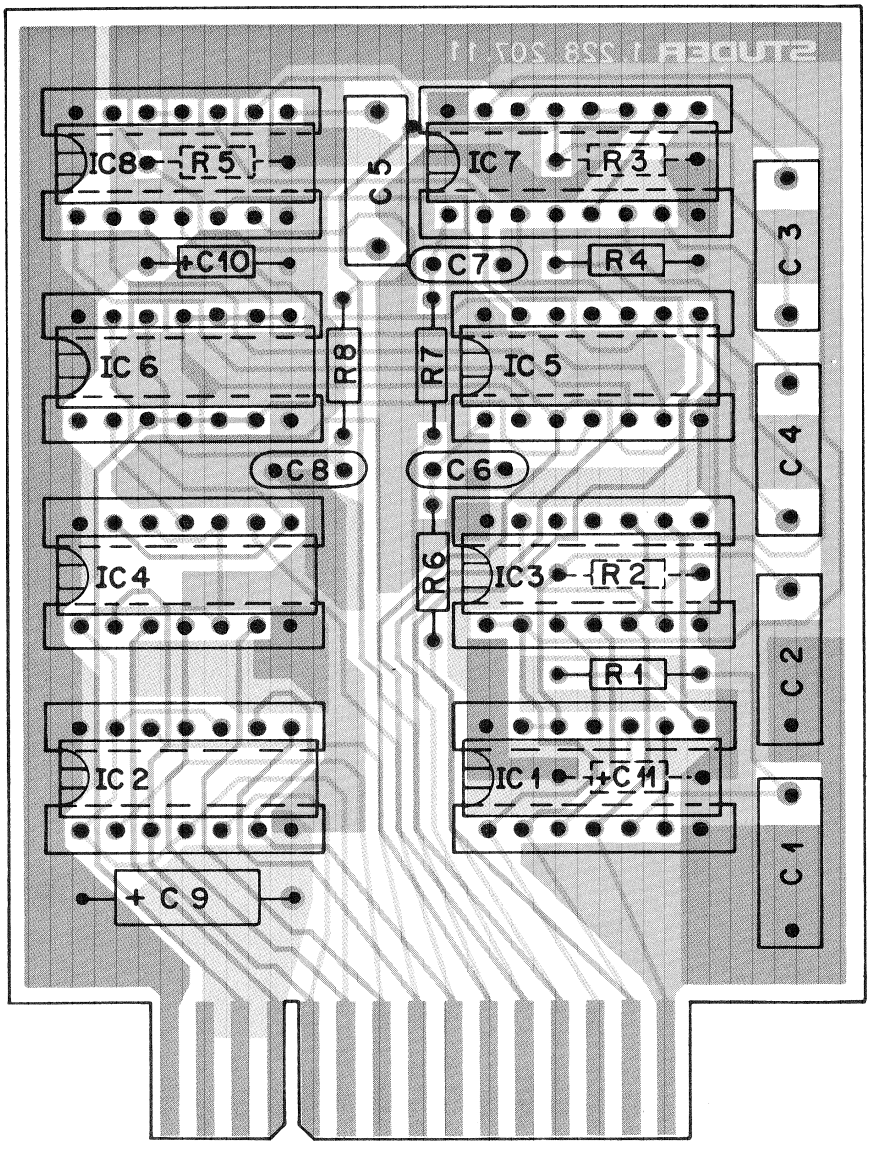
22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

	FIRST	LAST	MISSING
C	1	5	—
IC	1	8	—
R	1	4	—

			Unspezified carbon film resistors: 1/8 W – 5%	* * Commercial types
IDENTIFICATION	PART NAME	TYPE / REMARKS	SPECIFICATIONS	ORDER NUMBER
	Up/down Time Counter	Board assembled		1.228.206
C 1	Capacitor	ceramic	1 n F – 20% – 500 V	* *
C 2	Capacitor	tantalum	3,3 µ F – 20% – 10 V	* *
C 3	Capacitor	tantalum	3,3 µ F – 20% – 10 V	* *
C 4	Capacitor	tantalum	3,3 µ F – 20% – 10 V	* *
C 5	Capacitor	tantalum	3,3 µ F – 20% – 10 V	* *
IC 1	Integrated Circuit	SN 74190 N		* *
IC 2	Integrated Circuit	SN 74190 N		* *
IC 3	Integrated Circuit	SN 74190 N		* *
IC 4	Integrated Circuit	SN 7404 N		* *
IC 5	Integrated Circuit	SN 7409 N		* *
IC 6	Integrated Circuit	SN 7472 N		* *
IC 7	Integrated Circuit	SN 7486 N		* *
IC 8	Integrated Circuit	SN 74111 N		* *
R 1	Resistor	carbon composition	100 – 10% – 0,25 W	* *
R 2	Resistor	carbon composition	1 k – 10% – 0,25 W	* *
R 3	Resistor	carbon composition	1 k – 10% – 0,25 W	* *
R 4	Resistor	carbon composition	1 k – 10% – 0,25 W	* *

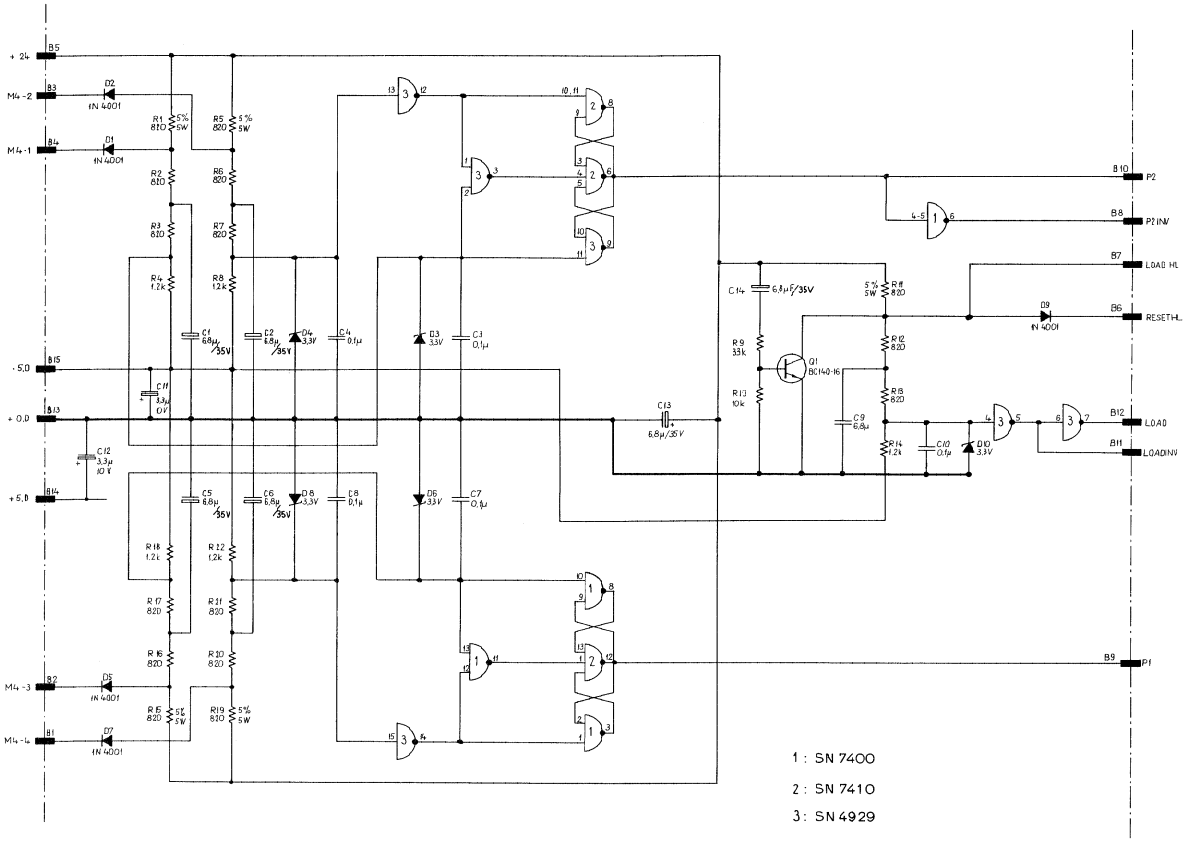


COUNTER SIGNAL CONDITIONER **1.228.207**

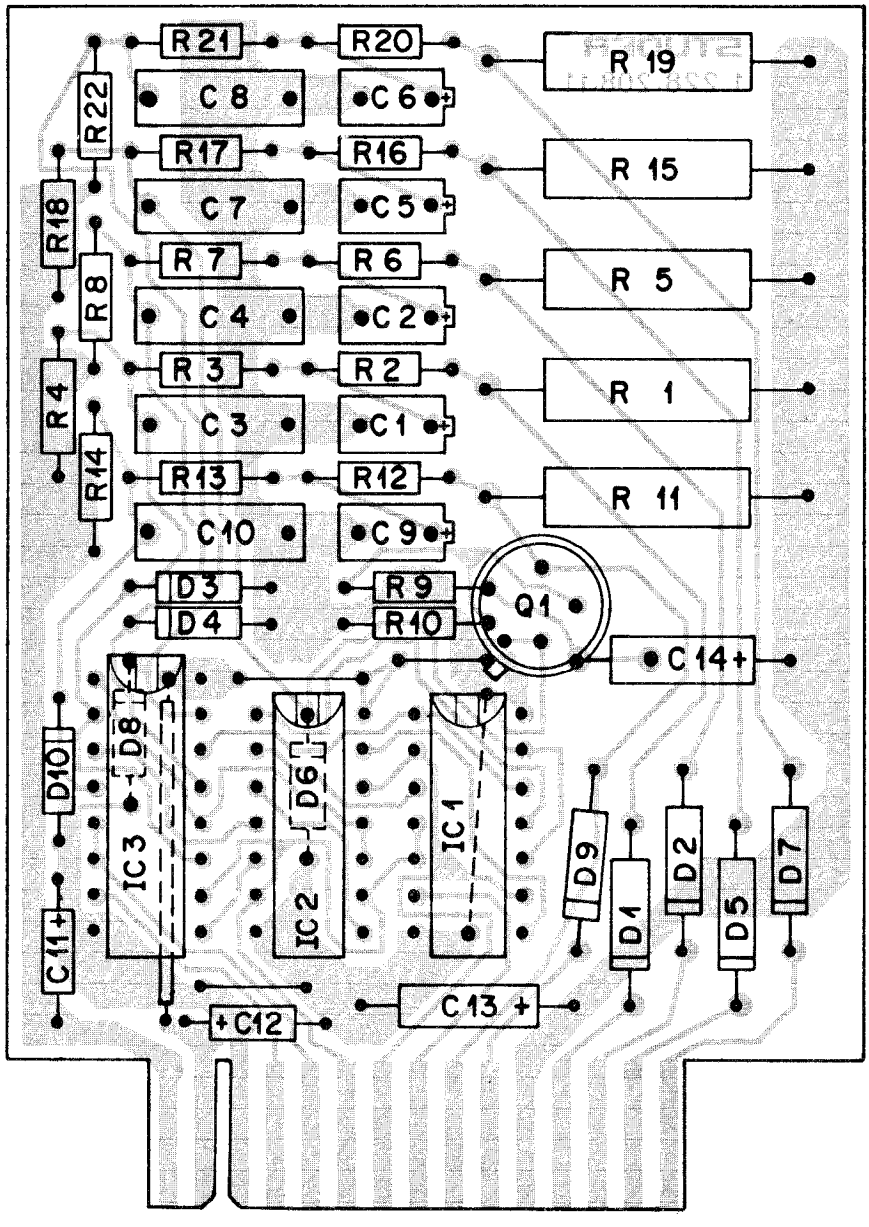


	FIRST	LAST	MISSING
C	1	11	–
IC	1	8	–
R	1	8	–

			Unspezified carbon film resistors: 1/8 W – 5%	* * Commercial types
IDENTIFICATION	PART NAME	TYPE / REMARKS	SPECIFICATIONS	ORDER NUMBER
	Counter Signal Conditioner	Board assembled		1.228.207
C 1	Capacitor	polycarbonat	10 n F – 10% – 250 V	* *
C 2	Capacitor	polycarbonat	10 n F – 10% – 250 V	* *
C 3	Capacitor	polycarbonat	0,1 µ F – 10% – 160 V	* *
C 4	Capacitor	polycarbonat	0,1 µ F – 10% – 160 V	* *
C 5	Capacitor	polycarbonat	10 n F – 10% – 250 V	* *
C 6	Capacitor	ceramic	1 n F – 20% – 500 V	* *
C 7	Capacitor	ceramic	1 n F – 20% – 500 V	* *
C 8	Capacitor	ceramic	1 n F – 20% – 500 V	* *
C 9	Capacitor	tantalum	35 µ F – 20% – 10 V	* *
C 10	Capacitor	tantalum	3,3 µ F – 20% – 10 V	* *
C 11	Capacitor	tantalum	3,3 µ F – 20% – 10 V	* *
IC 1	Integrated Circuit	SN 7400 N		* *
IC 2	Integrated Circuit	SN 7400 N		* *
IC 3	Integrated Circuit	SN 7451 N		* *
IC 4	Integrated Circuit	SN 7400 N		* *
IC 5	Integrated Circuit	SN 7451 N		* *
IC 6	Integrated Circuit	SN 7472 N		* *
IC 7	Integrated Circuit	SN 4929 N		* *
IC 8	Integrated Circuit	SN 7414 N		* *
R 1	Resistor	carbon composition	100 – 10% –0,25 W	* *
R 2	Resistor	carbon composition	100 – 10% –0,25 W	* *
R 3	Resistor	carbon composition	390 – 10% –0,25 W	* *
R 4	Resistor	carbon composition	390 – 10% –0,25 W	* *
R 5	Resistor	carbon composition	390 – 10% –0,25 W	* *
R 6	Resistor	carbon composition	100 – 10% –0,25 W	* *
R 7	Resistor	carbon composition	100 – 10% –0,25 W	* *
R 8	Resistor	carbon composition	100 – 10% –0,25 W	* *



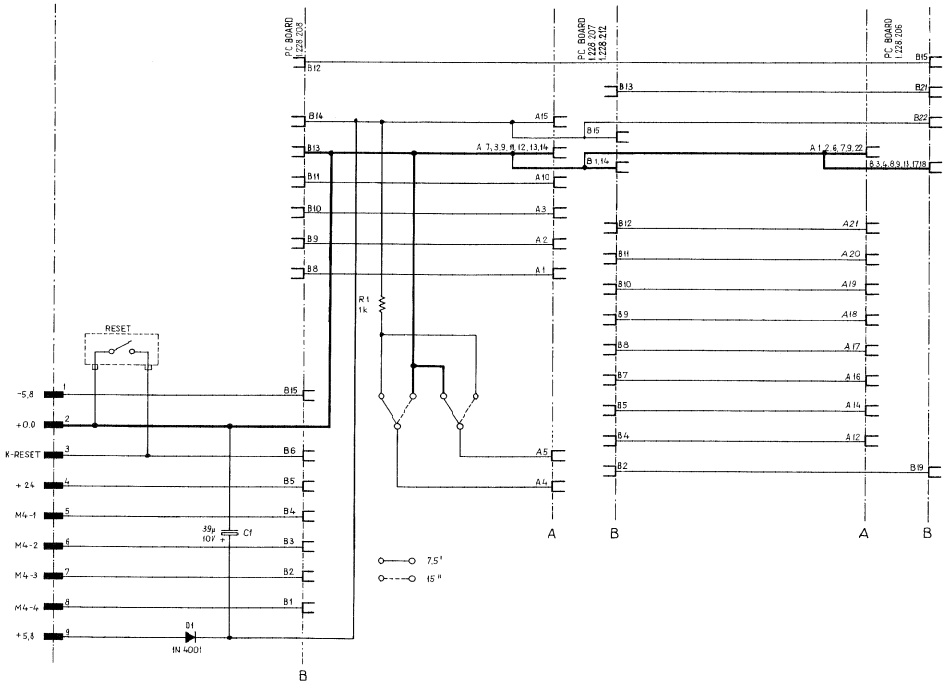
COUNTER SIGNAL RECEIVER **1.228.208**



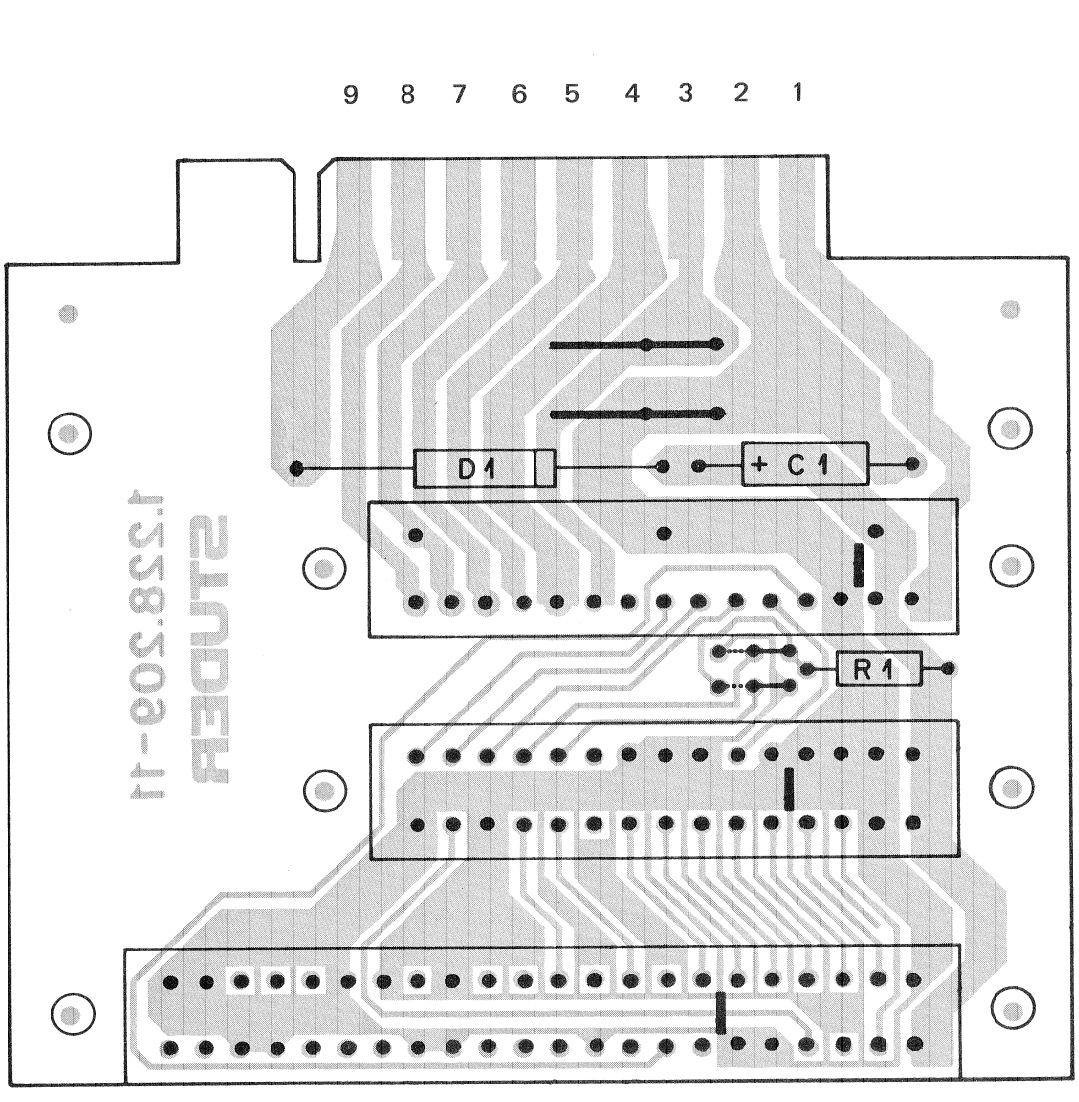
	FIRST	LAST	MISSING
C	1	14	—
IC	1	3	—
D	1	10	—
R	1	22	—
Q	1	1	—

			Unspezified carbon film resistors: 1/8 W – 5%	* * Commercial types
IDENTIFICATION	PART NAME	TYPE / REMARKS	SPECIFICATIONS	ORDER NUMBER
	Counter Signal Receiver	Board assembled		1.228.208
C 1	Capacitor	tantalum	6,8 µF – 20% – 35 V	* *
C 2	Capacitor	tantalum	6,8 µF – 20% – 35 V	* *
C 3	Capacitor	polycarbonat	0,1 µF – 10% – 160 V	* *
C 4	Capacitor	polycarbonat	0,1 µF – 10% – 160 V	* *
C 5	Capacitor	tantalum	6,8 µF – 20% – 35 V	* *
C 6	Capacitor	tantalum	6,8 µF – 20% – 35 V	* *
C 7	Capacitor	polycarbonat	0,1 µF – 10% – 160 V	* *
C 8	Capacitor	polycarbonat	0,1 µF – 10% – 160 V	* *
C 9	Capacitor	tantalum	6,8 µF – 20% – 35 V	* *
C 10	Capacitor	polycarbonat	0,1 µF – 10% – 160 V	* *
C 11	Capacitor	tantalum	3,3 µF – 20% – 10 V	* *
C 12	Capacitor	tantalum	3,3 µF – 20% – 10 V	* *
C 13	Capacitor	tantalum	6,8 µF – 20% – 35 V	* *
C 14	Capacitor	tantalum	6,8 µF – 20% – 35 V	* *
D 1	Si – Diode	1 N 4001		* *
D 2	Si – Diode	1 N 4001		* *
D 3	Zener – Diode		3,3 V – 5% – 0,4 W	* *
D 4	Zener – Diode		3,3 V – 5% – 0,4 W	* *
D 5	Si – Diode	1 N 4001		* *
D 6	Zener – Diode		3,3 V – 5% – 0,4 W	* *
D 7	Si – Diode	1 N 4001	3,3 V – 5% – 0,4 W	* *
D 8	Zener – Diode		3,3 V – 5% – 0,4 W	* *
D 9	Si – Diode	1 N 4001		* *
D 10	Zener – Diode		3,3 V – 5% – 0,4 W	* *
IC 1	Integrated Circuit	SN 7400 N		* *
IC 2	Integrated Circuit	SN 7410 N		* *
IC 3	Integrated Circuit	SN 4929 N		* *
Q 1	Transistor	BC 140 – 16		* *
R 1	Resistor	wire – wound	820 – 5% – 4 W	* *
R 2	Resistor	carbon composition	820 – 10% –0,25 W	* *
R 3	Resistor	carbon composition	820 – 10% –0,25 W	* *
R 4	Resistor	carbon composition	1,2 k – 10% –0,25 W	* *
R 5	Resistor	wire – wound	820 – 5% – 4 W	* *
R 6	Resistor	carbon composition	820 – 10% –0,25 W	* *
R 7	Resistor	carbon composition	820 – 10% –0,25 W	* *
R 8	Resistor	carbon composition	1,2 k – 10% –0,25 W	* *
R 9	Resistor	carbon composition	33 k – 10% –0,25 W	* *
R 10	Resistor	carbon composition	10 k – 10% –0,25 W	* *
R 11	Resistor	wire – wound	820 – 5% – 4 W	* *
R 12	Resistor	carbon composition	820 – 10% –0,25 W	* *
R 13	Resistor	carbon composition	820 – 10% –0,25 W	* *

			Unspezified carbon film resistors: 1/8 W – 5%	* * Commercial types
IDENTIFI-CATION	PART NAME	TYPE / REMARKS	SPECIFICATIONS	ORDER NUMBER
R 14	Resistor	carbon composition	1,2 k – 10% –0,25 W	* *
R 15	Resistor	wire – wound	820 – 5% – 4 W	* *
R 16	Resistor	carbon composition	820 – 10% –0,25 W	* *
R 17	Resistor	carbon composition	820 – 10% –0,25 W	* *
R 18	Resistor	carbon composition	1,2 k – 10% –0,25 W	* *
R 19	Resistor	carbon composition	820 – 10% –0,25 W	* *
R 20	Resistor	carbon composition	820 – 10% –0,25 W	* *
R 21	Resistor	carbon composition	820 – 10% –0,25 W	* *
R 22	Resistor	carbon composition	1,2 k – 10% –0,25 W	* *

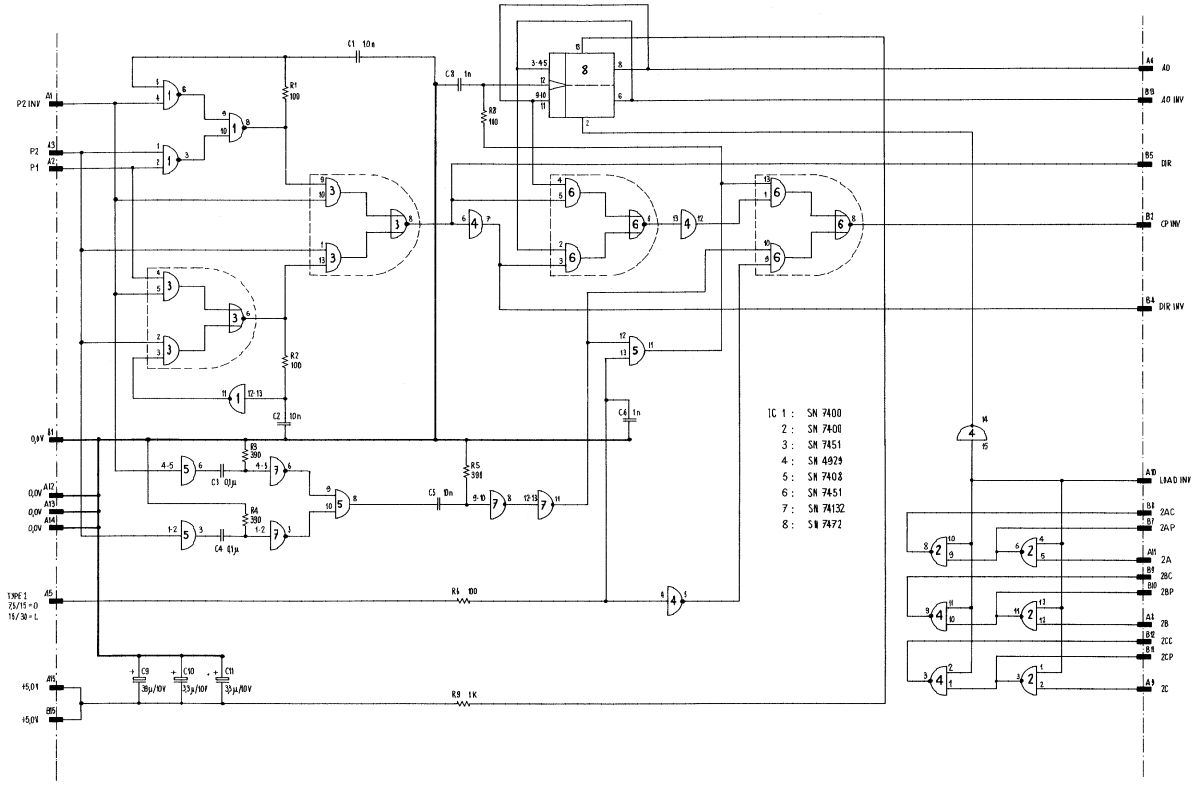


COUNTER INTERCONNECTOR 1.228.209

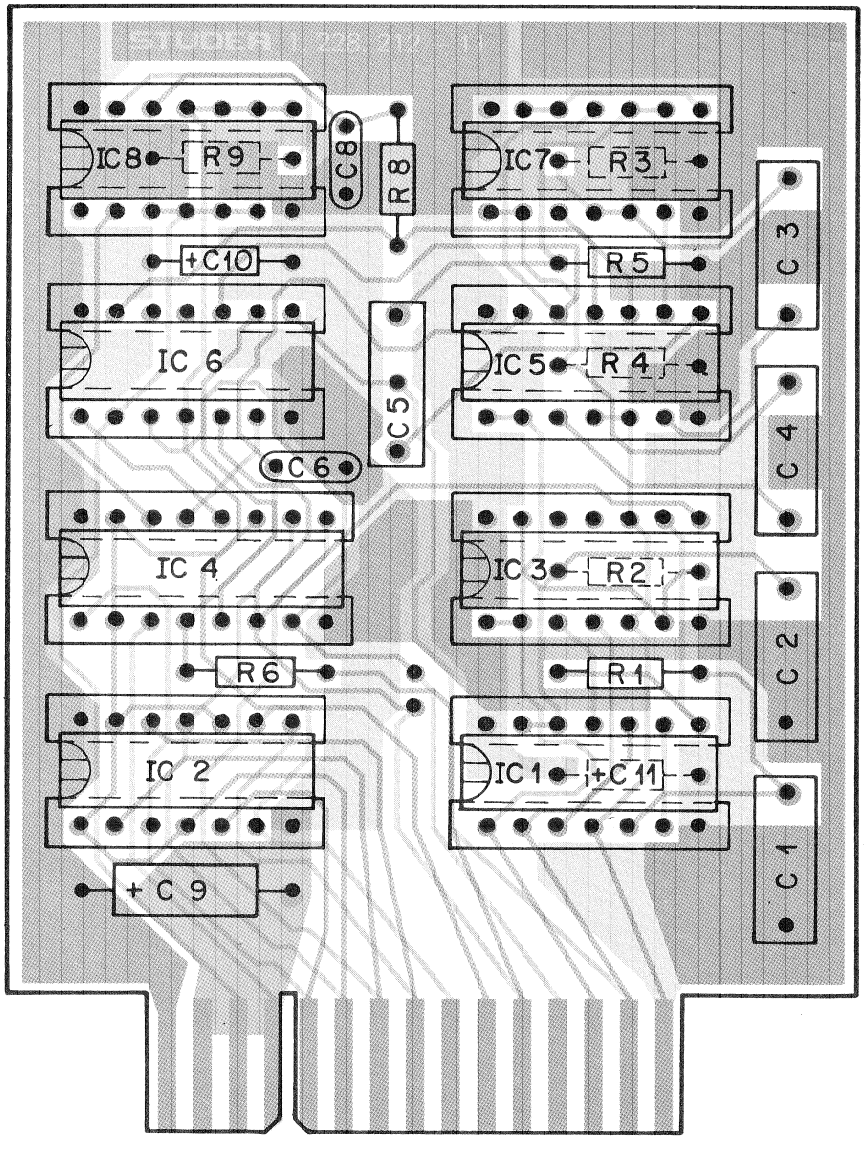


	FIRST	LAST	MISSING
C	1	1	–
D	1	1	–
R	1	1	–

			Unspezified carbon film resistors: 1/8 W – 5%	* * Commercial types
IDENTIFI-CATION	PART NAME	TYPE / REMARKS	SPECIFICATIONS	ORDER NUMBER
	Counter Interconnector	Board assembled		1.228.209
C 1	Capacitor	tantalum	39 μF – 20% – 10 V	* *
D 1	Si – Diode	1 N 4001		* *
R 1	Resistor	carbon composition	1 k – 10% –0,25 W	* *

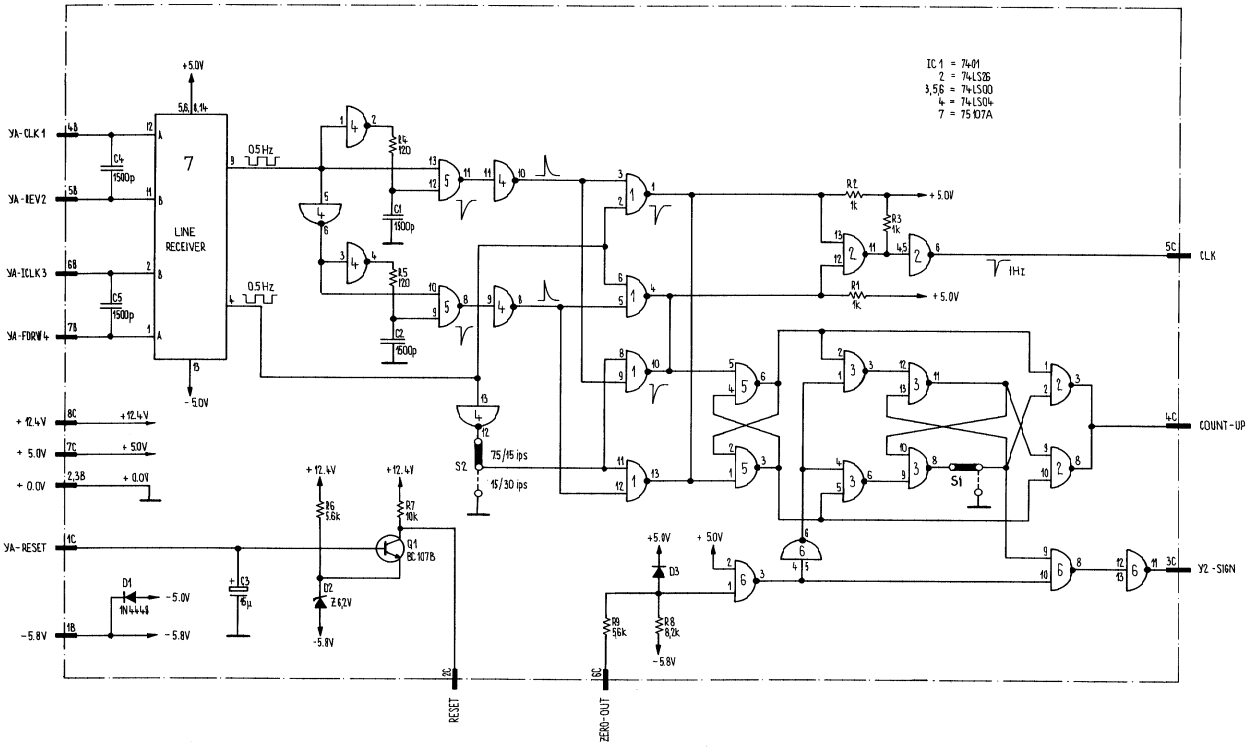


COUNTER SIGNAL CONDITIONER 1.228.212

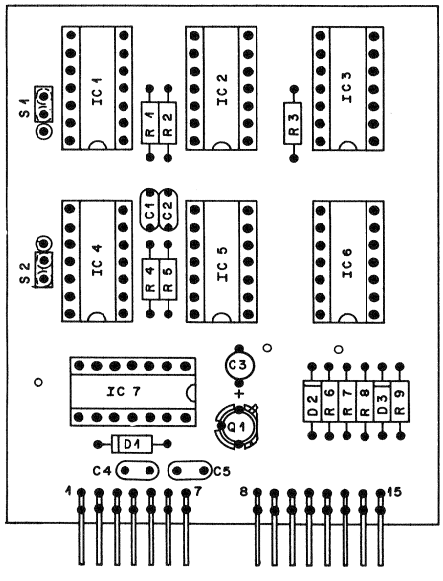


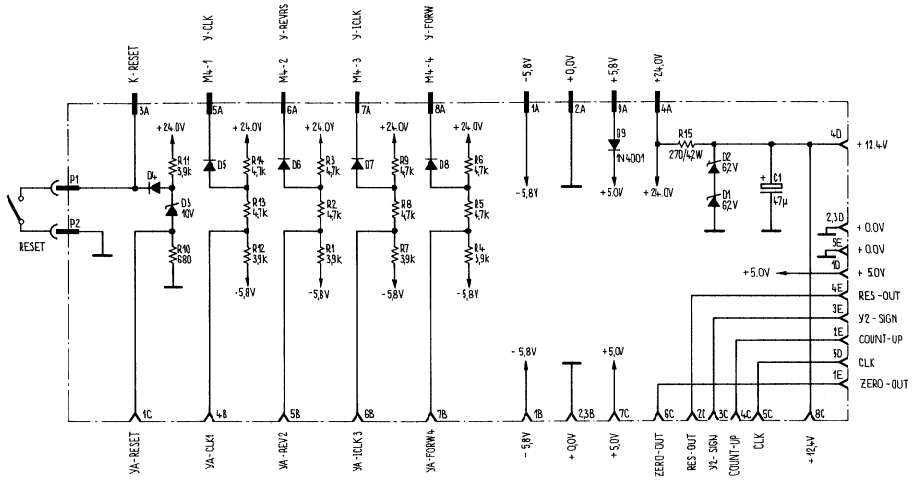
	FIRST	LAST	MISSING
C	1	11	7
IC	1	8	—
R	1	9	7

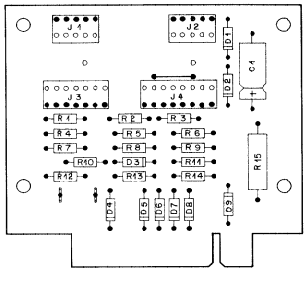
			Unspezified carbon film resistors: 1/8 W – 5%	* * Commercial types
IDENTIFICATION	PART NAME	TYPE / REMARKS	SPECIFICATIONS	ORDER NUMBER
	Counter Signal Conditioner	Board assembled		1.228.212
C 1	Capacitor	polycarbonat	10 n F – 10% – 250 V	* *
C 2	Capacitor	polycarbonat	10 n F – 10% – 250 V	* *
C 3	Capacitor	polycarbonat	0,1 µ F – 10% – 160 V	* *
C 4	Capacitor	polycarbonat	0,1 µ F – 10% – 160 V	* *
C 5	Capacitor	polycarbonat	10 n F – 10% – 250 V	* *
C 6	Capacitor	ceramic	1 n F – 20% – 500 V	* *
C 8	Capacitor	ceramic	1 n F – 20% – 500 V	* *
C 9	Capacitor	tantalum	39 µ F – 20% – 10 V	* *
C 10	Capacitor	tantalum	3,3 µ F – 20% – 10 V	* *
C 11	Capacitor	tantalum	3,3 µ F – 20% – 10 V	* *
IC 1	Integrated Circuit	SN 7400 N		* *
IC 2	Integrated Circuit	SN 7400 N		* *
IC 3	Integrated Circuit	SN 7451 N		* *
IC 4	Integrated Circuit	SN 4929 N		* *
IC 5	Integrated Circuit	SN 7408 N		* *
IC 6	Integrated Circuit	SN 7451 N		* *
IC 7	Integrated Circuit	SN 74132 N		* *
IC 8	Integrated Circuit	SN 7472 N		* *
R 1	Resistor	carbon composition	100 – 10% –0,25 W	* *
R 2	Resistor	carbon composition	100 – 10% –0,25 W	* *
R 3	Resistor	carbon composition	390 – 10% –0,25 W	* *
R 4	Resistor	carbon composition	390 – 10% –0,25 W	* *
R 5	Resistor	carbon composition	390 – 10% –0,25 W	* *
R 6	Resistor	carbon composition	100 – 10% –0,25 W	* *
R 8	Resistor	carbon composition	100 – 10% –0,25 W	* *
R 9	Resistor	carbon composition	1 k – 10% –0,25 W	* *



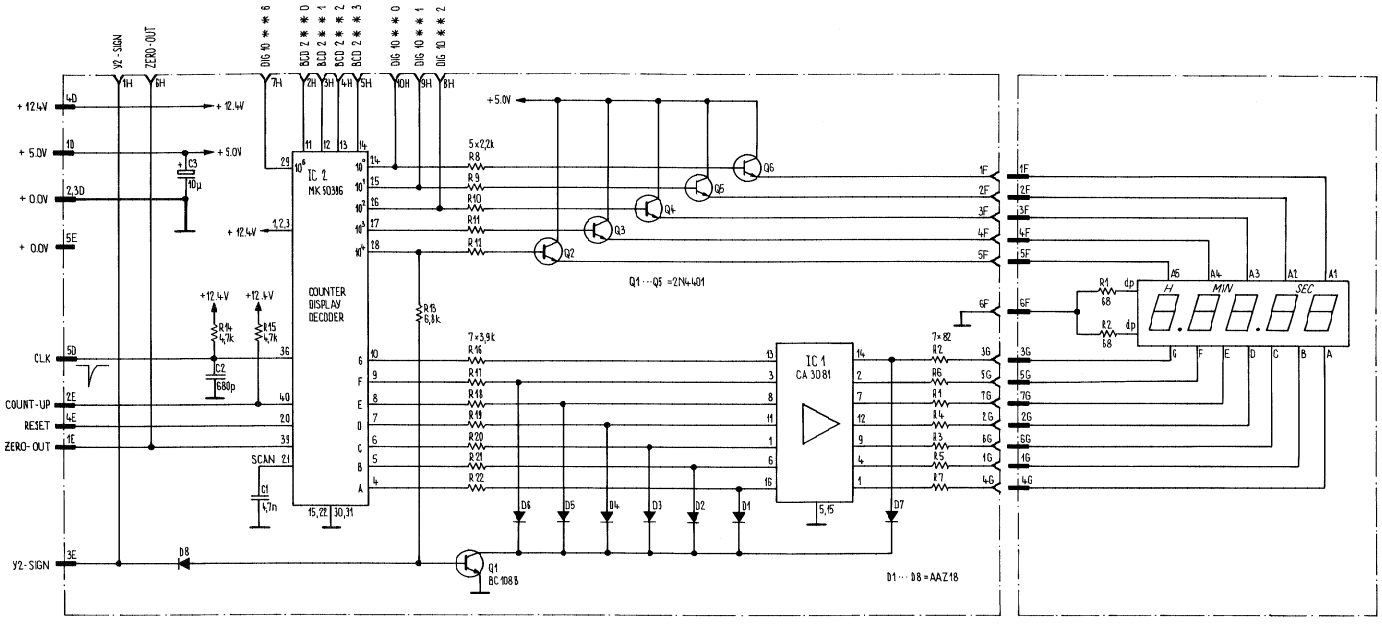
STUDER	1.228.811
COUNTER DECODER	
A 80 R/A80 VU MKII	Ed.2 3.77

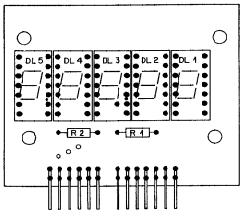

S1
IC 1
R 4
R 2
IC 2
R 3
IC 3
S2
IC 4
C1
C2
R 4
R 5
IC 5
IC 6
C3
IC 7
Q1
D2
R 6
R 7
R 8
D3
R 9
D1
C4
C5
1
7
8
15





STUDER	1.228.812
BASIS BOARD	
A80R/A80RC/A80VU MKII/A81	Ed.2 3.77

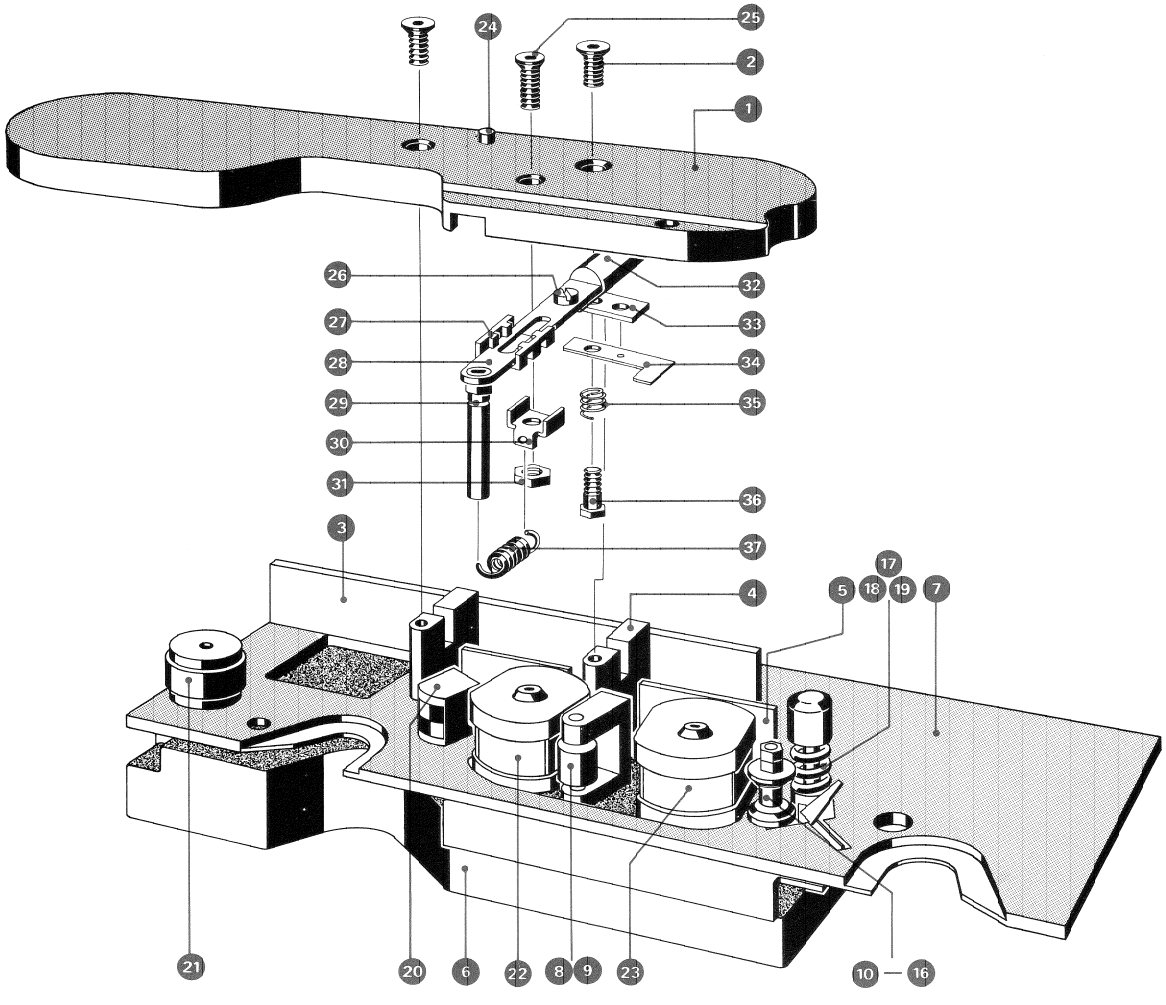




STUDER	1.228.813
COUNTER	
A80R/A80RC/A80VU MKII/A81	Ed.2 3.77

STUDER	1.228.814
DISPLAY	
A80R/A80RC/A80VU MKII/A81	Ed.1 3.77

A

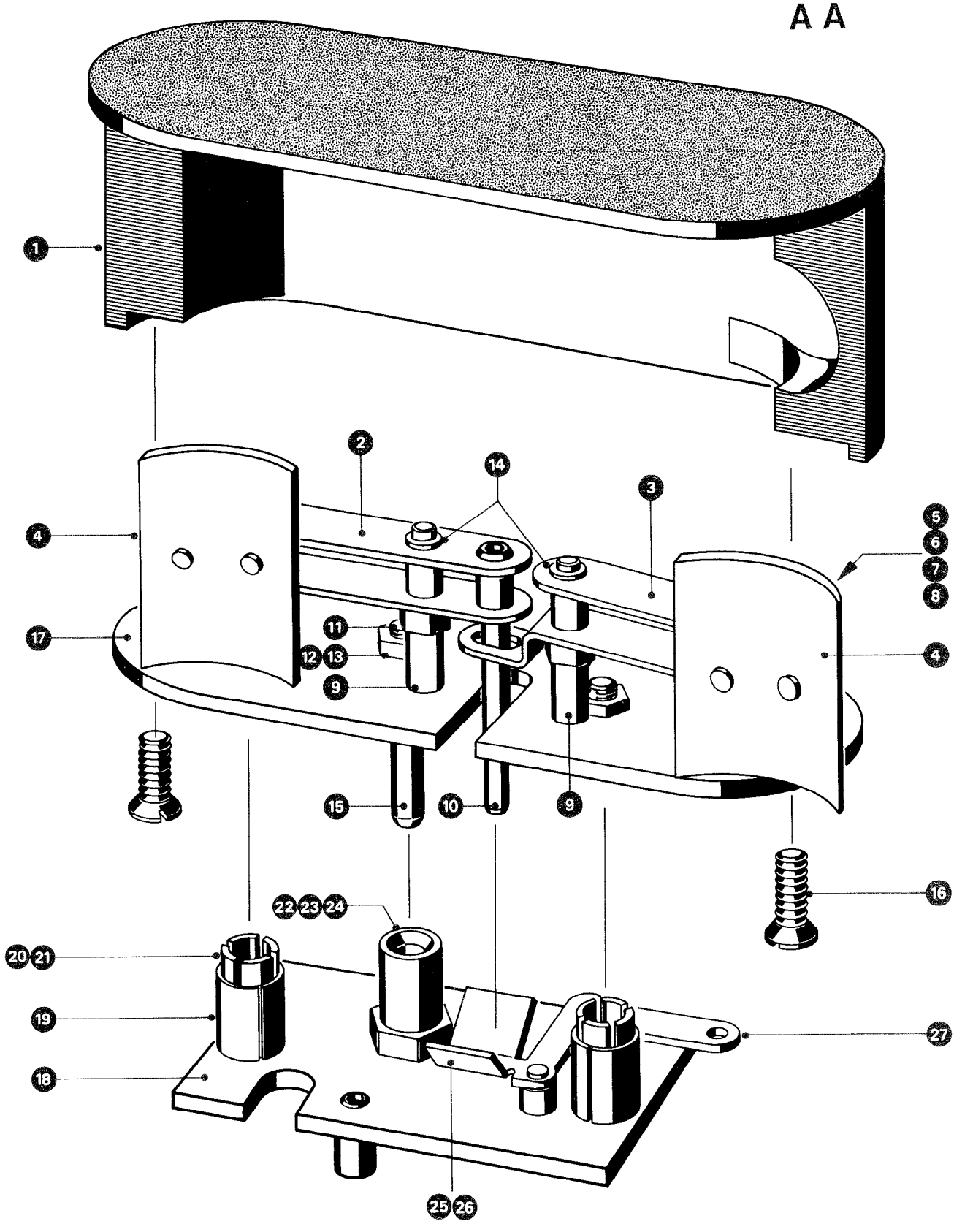

24
25
2
1
26
32
27
33
28
34
29
35
30
31
36
3
37
17
5
18
19
7
4
21
20
6
22
8
9
23
10
16

INDEX	QTY	PART NAME	ORDER NUMBER
A		**Kopfträger 0,25"** **Head block assembly 0.25"**	
1	1	Kopfschutz 0,25" Head block cover	1.020.710.28
2	2	Senkschraube IS M4 x 10 Counter sunk screw IS M4 x 10	21.51.2456
3	1	Deckleiste Cover strip	1.020.710.31
4	2	Stütze 0,25" Spacer mount 0.25"	1.020.710.08
5	1	Abschirmblech oben 0,25" Screen plate 0.25"	1.020.710.29
6	1	Kopfträgerchassis kompl. Head block chassis	1.020.700.00
7	1	Abdeckplatte 0,25" Cover plate 0.25"	1.020.711.02
8	1	Zwischenberuhigungsrolle kompl. 0,25" Scrape flutter idler 0.25"	1.080.580.00
9	1	Sechskant-Mutter spez. Nut	1.080.580.02
		Bandführung kompl. bestehend aus: **Tape guide, comprising:**	
10	1	Bandführungsbolzen Tape guide spindle	1.020.710.25
11	2	Bandführungsscheibe Tape guide disk	1.020.710.26
12	1	Bandführungshülse Spacer bush	1.020.113.03
13	1	Mutter M3 Nut M3	22.01.8030
14	2	Druckfeder Pressure spring	1.080.260.12

INDEX	QTY	PART NAME	ORDER NUMBER
15	1	Sicherungsscheibe Lock washer	24.16.1040
16	1	Mutter Nut	22.01.8040
17	1	Schere kompl. Tape cutter	1.020.715
18	1	Messer Cutter blade	1.020.715.01
19	1	Messer Cutter blade	1.020.715.02
20	1	Löschkopf 0,25" Vollspur, oder Erase head 0.25" full track, or	1.216.012.01
	2	Löschkopf 0,25" Halbspur Erase head 0.25" half track	1.216.022.01+02
21	1	Dummy-Kopf oder Löschkopf 0,25" Halbspur Dummy head or erase head 0.25" half track	1.216.012.02 oder/or 1.216.022.02
22		Aufnahmekopf kompl. 0,25" Vollspur Record head 0.25" full track	1.216.010.00
		Aufnahmekopf kompl. 0.25" Halbspur Record head 0.25" half track	1.216.020.00
23		Wiedergabekopf kompl. 0,25" Vollspur Playback head 0.25" full track	1.216.011.00
		Wiedergabekopf kompl. 0,25" Halbspur Playback head 0.25" half track	1.216.021.00
24	1	Taste Button	1.020.770.08
25	1	Schraube IS M3 x 12 Screw IS M3 x 12	21.51.2357
26	1	Schraube M3 x 4 Screw M3 x 4	21.01.0352

INDEX	QTY	PART NAME	ORDER NUMBER
27	1	Schiebergehäuse Slider housing	1.020.820.03
28	1	Schieber Slider	1.020.770.03
29	1	Abhebebolzen Lift bolt	1.020.770.04
30	1	Halter Bracket	1.020.820.04
31	1	Mutter Nut	22.01.8030
32	1	Knopf Knob	1.020.770.05
33	1	Platte Plate	1.020.770.06
34	1	Klinke Latch	1.020.770.07
35	1	Druckfeder Pressure spring	1.020.770.10
36	1	Ansatzschraube Screw	1.020.715.05
37	1	Zugfeder Tension spring	1.020.820.17

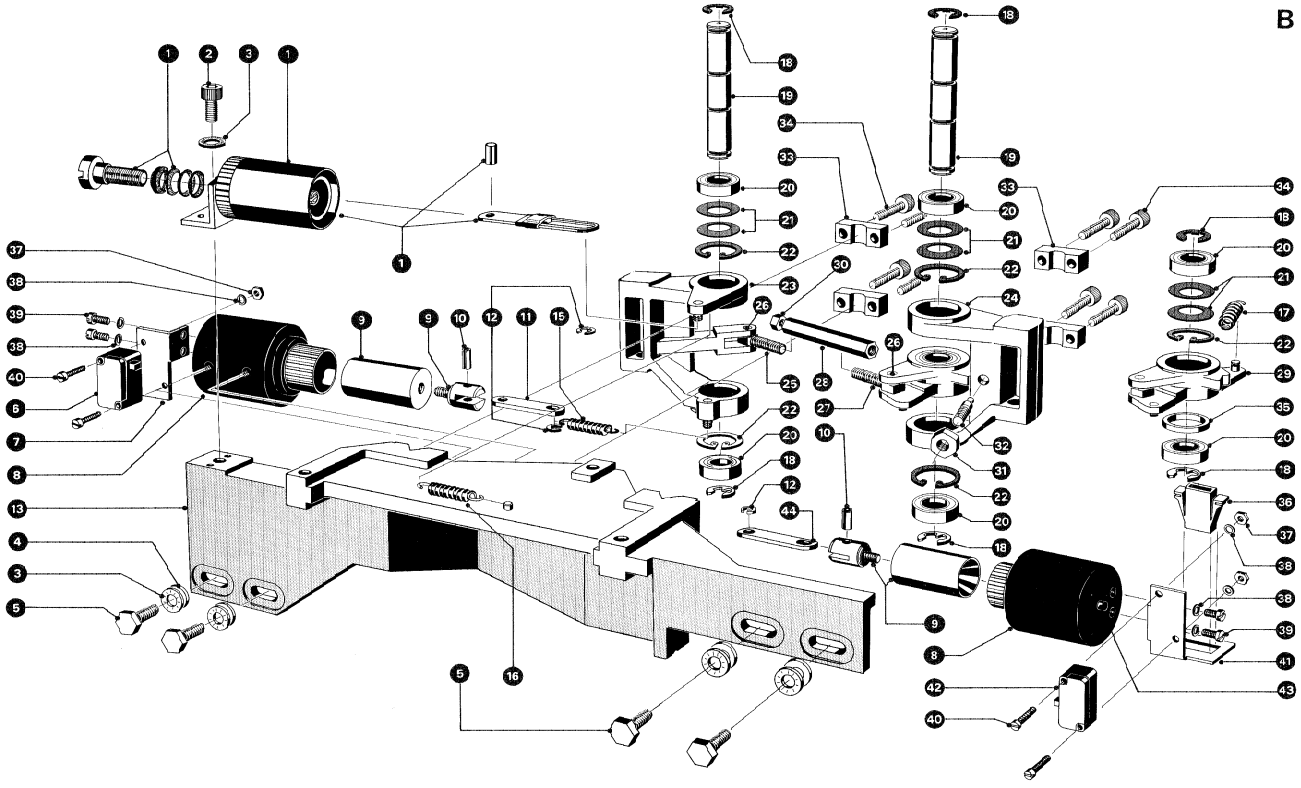
A A



INDEX	QTY	PART NAME	ORDER NUMBER
AA		**Abschirmplatte kompl.** **screening plate, complete**	
		Abschirmklappe 0.5" head shield, 1/2"	1.080.750
		Abschirmklappe 1" head shield, 1"	1.080.760
		Abschirmklappe 2" head shield, 2"	1.080.765
1	1	Abdeckung 0.5" housing 1/2"	1.080.750.01
1	1	Abdeckung 1" housing, 1"	1.080.760.01
1	1	Abdeckung 2" housing, 2"	1.080.765.01
2	1	Hebel rechts lever right	1.080.754
3	1	Hebel links lever left	1.080.752
4	2	Abschirmung 0.5" head shield 1/2"	1.080.756
4	2	Abschirmung 1" head shield 1"	1.080.762
4	2	Abschirmung 2" head shield 2"	1.080.767
5	2	Gelenkbolzen linkage bolt	1.080.750.04
6	2	Zylinderstift cylindrical pin	25.06.8206
7	2	Druckfeder pressure spring	1.080.750.08
8	2	Benzing-Sicherung circlip	24.16.3019
9	2	Lagerbolzen 0.5" pivot bolt 1/2"	1.080.750.03
9	2	Lagerbolzen 1" pivot bolt 1"	1.080.760.02
9	2	Lagerbolzen 2" pivot bolt 2"	1.080.765.02
10	1	Mitnehmerbolzen 0.5" linking pin 1/2"	1.080.750.05
10	1	Mitnehmerbolzen 1" linking pin 1"	1.080.760.03
10	1	Mitnehmerbolzen 2" linking pin 2"	1.080.765.03
11	2	Haltebolzen retaining bolt	1.080.750.07
12	3	Mutter M4 nut M4	22.01.8040

INDEX	QTY	PART NAME	ORDER NUMBER
13	3	Sicherungsscheibe lock washer	24.16.1040
14	2	Benzing Sicherung circlip	24.16.3019
15	1	Führungsbolzen guide bolt	1.080.750.06
16	4	Senkschraube IS M4 x 6 counter-sunk screw IS M4 x 6	21.51.2454
17	1	Grundplatte base plate	1.080.750.02

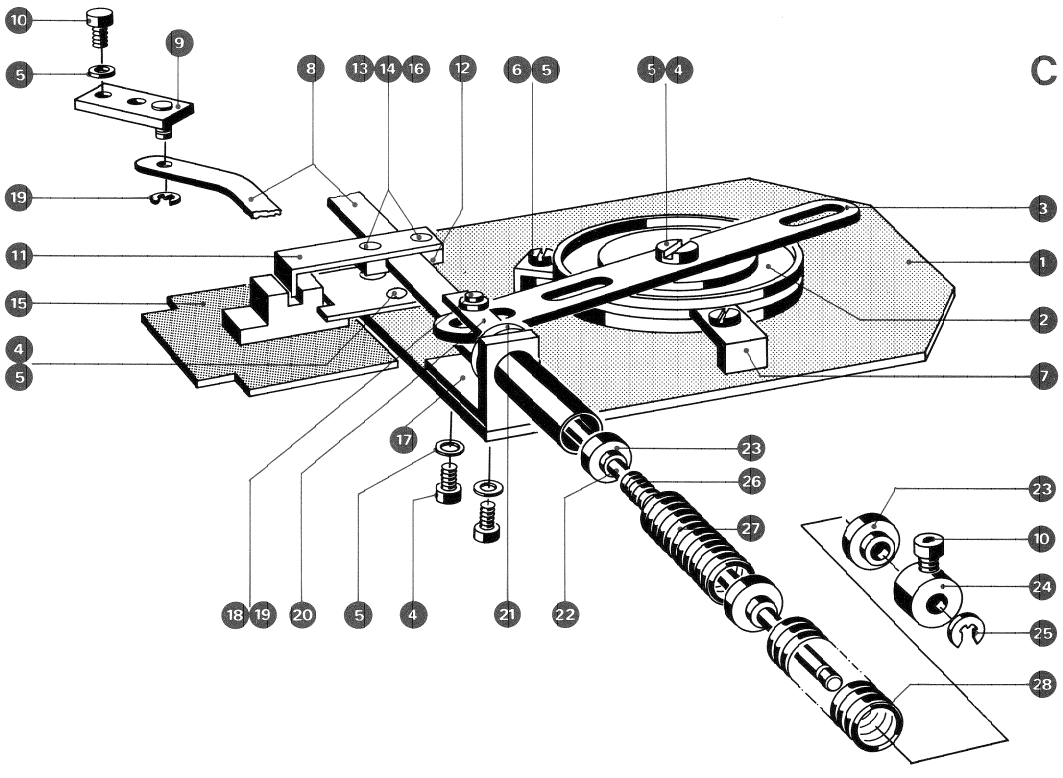
B



INDEX	QTY	PART NAME	ORDER NUMBER
B		**Andruckaggregat** **Pinch roller assembly**	**1.080.124**
1	1	Dämpfungspumpe kompl. Dashpot complete	1.080.130
2	1	Zylinderschraube IS Allen screw IS	21.53.0455
3	13	Sicherungsscheibe Lock washer	24.16.1040
4	4	U-Scheibe Washer	23.01.2043
5	4	Sechskant-Schraube M4 x 8 Hex screw M4 x 8	21.60.4455
6	1	Mikro-Switch Microswitch	55.01.0125
7	1	Winkel Bracket	1.080.120.10
8	2	Andruckmagnet Pressure solenoid	1.014.745
9	2	Anker kompl. Solenoid plunger, compl.	1.014.743
10	2	Zylinder-Stift o 4 x 10 Cylinder pin o 4 x 10	25.06.8356
11	1	Stange Rod	1.080.123
12	3	Benzing Sicherung Circlip	24.16.3023
13	1	Andruckträger Pressure lever	1.080.120.01
14			

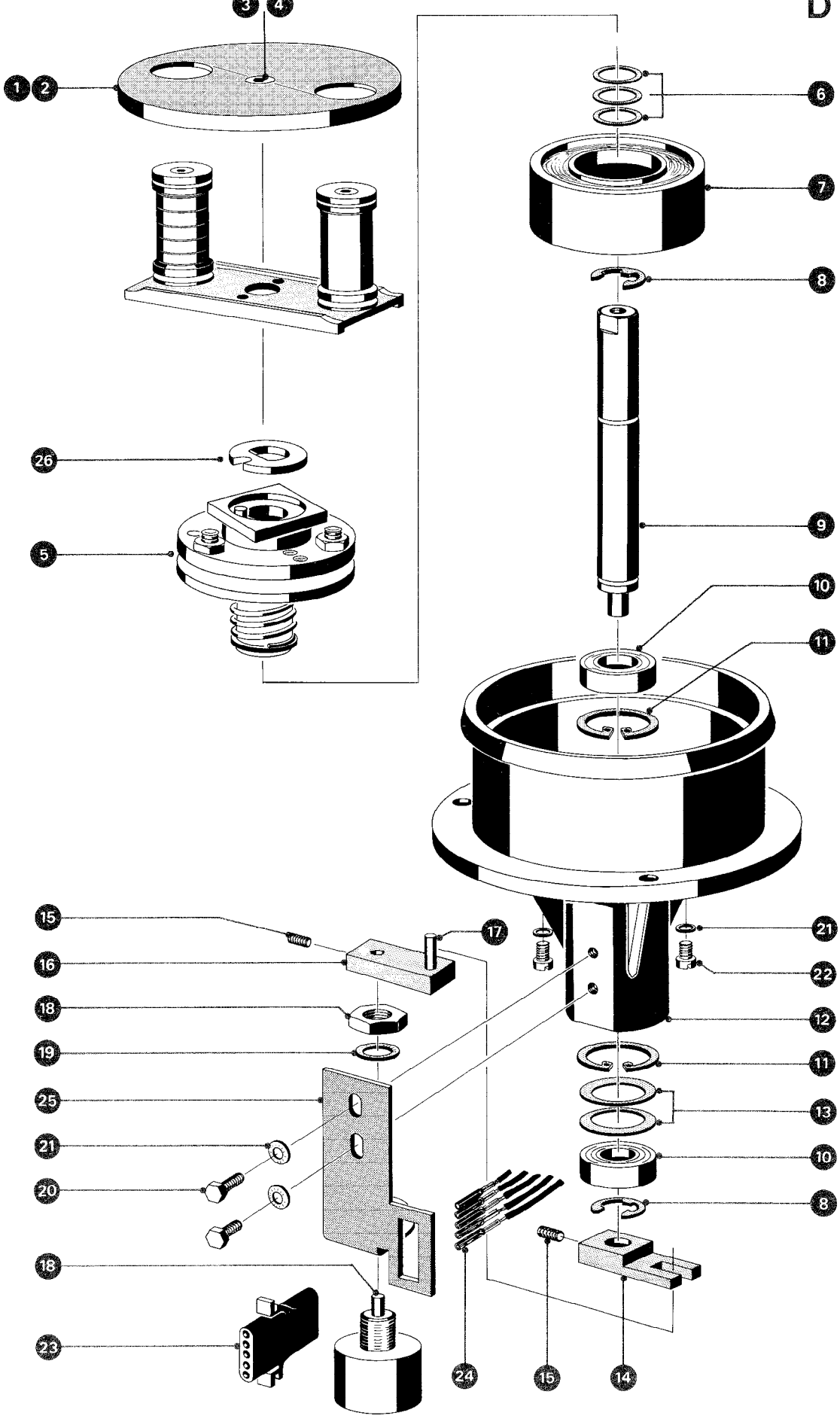
INDEX	QTY	PART NAME	ORDER NUMBER
15	1	Zugfeder 0,5 ... 2'' Tension spring 1/2 ... 2''	1.080.230.04
	1	Zugfeder 0,25'' Tension spring 1/4''	1.080.230.14
16	1	Zugfeder Tension spring	1.080.230.05
17	1	Zugfeder Tension spring	1.080.125.04
18	4	Wellensicherung D8 Circlip D8	24.16.3080
19	2	Welle Spindle	1.080.135.03
20	6	Miniatur-Kugellager Miniature ball-race	41.99.0103
21	6	Tellerfeder K Spring washer K	37.02.0206–09
22	5	Seeger Innensicherung Retaining ring, internal	24.16.4220
23	1	Vorberuhigungsarm Stabilizer arm	1.080.134.01
24	1	Andruckarm Pressure arm	1.080.126.02
25	1	Gelenkstück mit Rechtsgewinde Eye screw	1.080.135.02
26	2	Achse Spindle	1.080.135.03
27	1	Gelenkstück mit Linksgewinde Eye screw, left-hand thread	1.080.130.02
28	1	Gewindestange Connecting rod	1.080.120.04
29	1	Andruckhebel Pressure lever	1.080.130.01

INDEX	QTY	PART NAME	ORDER NUMBER
30	1	Mutter Nut	22.01.8050
31	1	Mutter Nut	22.01.8040
32	1	Ösenschraube Eye screw	1.080.125.03
33	4	Klemmstück Clamp	1.080.124.02
34	8	Zylinderschraube IS M4 x 20 Allen screw IS M4 x 20	21.53.0460
35	1	Distanzhülse Spacer sleeve	1.080.125.05
36	1	Kupplungsgehäuse Coupling housing	54.02.0403
37	4	Mutter Nut	22.01.8003
38	8	Sicherungsscheibe Lock washer	24.16.1030
39	4	Zylinderschraube M3 x 5 CH screw M3 x 5	21.01.0353
40	4	Zylinderschraube M3 x 16 CH screw M3 x 16	21.01.0372
41	1	Halter Bracket	1.080.120.08
42	1	Mikro-Switch Microswitch	55.01.0124
43	2	Schaltbolzen Switching bolt	1.080.120.09
44	1	Stange Rod	1.080.120.06


C
10
5
9
8
13
14
16
12
6
5
5
4
19
11
15
4
5
3
1
2
7
17
23
26
27
18
19
20
5
4
21
22
23
10
24
25
28

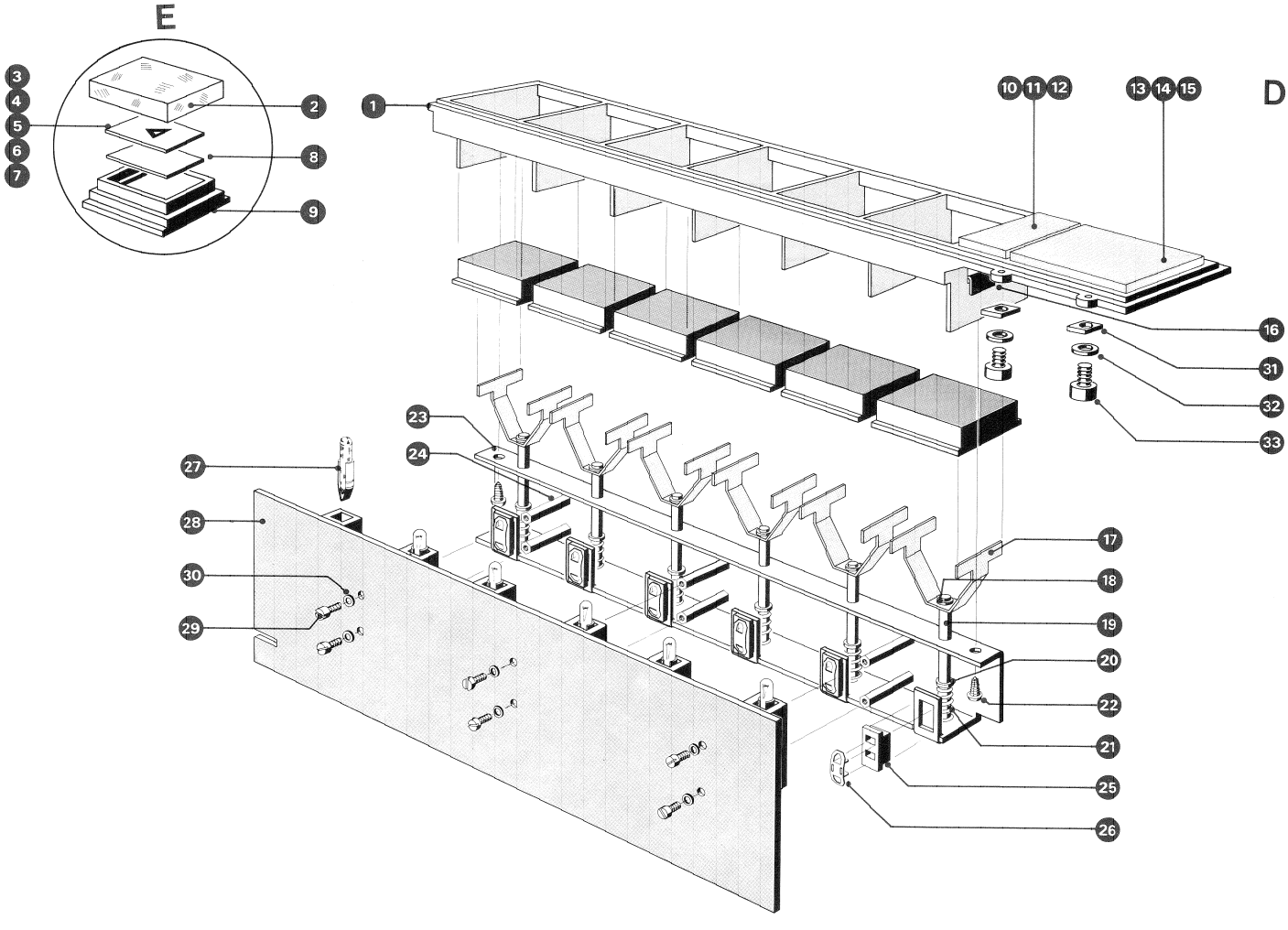
INDEX	QTY	PART NAME	ORDER NUMBER
C		**Dämpfungsaggregat kompl.** **Dashpot assembly compl.**	
1	1	Platte Mounting plate	1.080.164–06
2	1	Dämpfungsdose kompl. Dashpot compl.	1.080.164.00
3	1	Hebel Lever	1.080.105.02
4	3	Schraube M3 x 6 Screw M3 x 6	21.01.0354
5	10	Sicherungsscheibe Lock washer	24.16.1030
6	3	Schraube M3 x 8 Screw M3 x 8	21.01.0355
7	3	Winkel Angle bracket	1.080.164.05
8	1	Stange Rod riveted	1.080.142.05
9	1	Hebel genietet Lever	1.080.158
10	2	Schraube M3 x 5 Screw M3 x 5	21.01.0353
11	1	Schalterwinkel Switch bracket	1.081.010.24
12	1	Gewindestück Threaded pin	1.081.010.23
13	2	Schraube M2,5 x 4 Screw M2.5 x 4	21.01.0277
14	2	U-Scheibe Washer	23.01.1027
15	1	Bandwaagen-Endschalter Tape tension sensor end switch	1.081.144

INDEX	QTY	PART NAME	ORDER NUMBER
16	2	Sicherungsscheibe Lock washer	24.16.1025
17	1	Lager Bearing	1.080.175
18	1	Gelenkbolzen Pivot pin	1.080.170.02
19	4	Benzing-Sicherung Circlip	24.16.3023
20	1	Gelenkstück Linkage	1.080.170.01
21	1	Anschlagscheibe End-stop washer	1.080.170.03
22	1	Achse Spindle	1.080.170.04
23	3	Führungshülse Guiding sleeve	1.080.170.05
24	1	Stellring Adjusting ring	1.080.170.10
25	1	Benzing-Sicherung Circlip	24.16.3032
26	1	Druckfeder Pressure spring	1.080.170.06
27	1	Druckfeder Pressure spring	1.080.172.02
28	1	Druckfeder Pressure spring	1.080.170.09


D
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26

INDEX	QTY	PART NAME	ORDER NUMBER
D		**Bandwaage links** **Tape tension sensor, left**	**1.080.142**
		Bandwaage rechts **Tape tension sensor, right**	**1.080.146**
1	1	Deckel graviert links Engraved cover left	1.080.142.12
2	1	Deckel graviert rechts Engraved cover right	1.080.146.01
3	2	Senkschraube spezial Counter-sunk screw, special	1.080.142.10
4	2	Benzing-Sicherung Circlip	24.16.3032
5	1	Blockierrolle kompl. Lock wheel armature hub compl.	1.080.148
6	*	Distanzscheibe Spacer shim	1.080.530.06–10
7	1	Haltemagnet Solenoid	1.080.153
8	2	Wellensicherung Spindle securing clip	24.16.3080
9	1	Achse Spindle	1.080.142.07
10	2	Miniatur-Kugellager Miniature ball-race	41.99.0103
11	2	Seeger-Innensicherung Retaining ring, internal	24.16.4220
12	1	Flansch kompl. Bearing housing, compl.	1.080.150
13	2	Tellerfeder K Spring washer K	37.02.0206

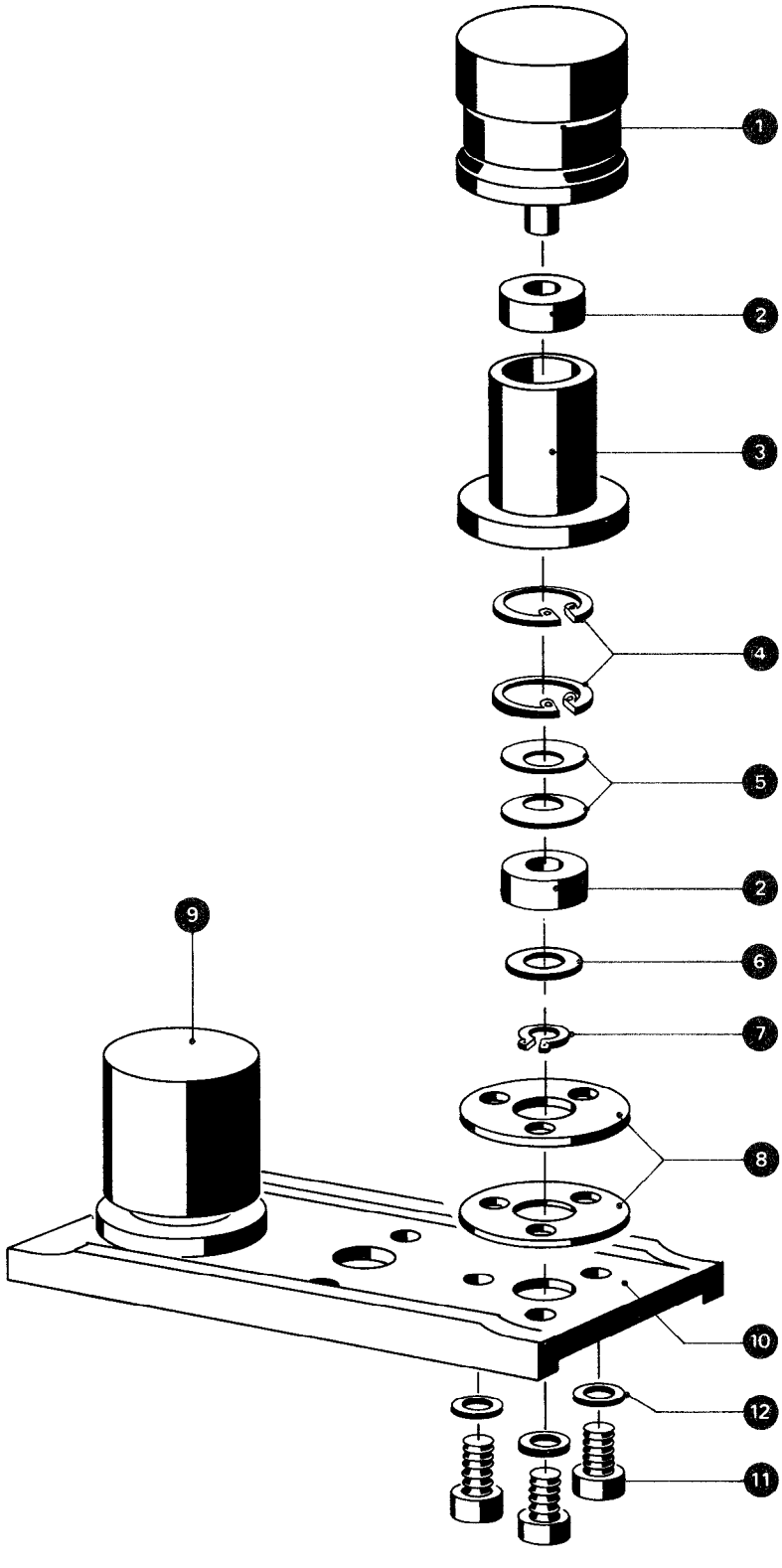
INDEX	QTY	PART NAME	ORDER NUMBER
14	1	Mitnehmergabel Coupling fork	1.080.310.08
15	1	Gewinde-Stift IS M3 x 4 Threaded pin IS M3 x 4	21.59.5352
16	1	Mitnehmer zu Bandwaage Coupling lever	1.080.042.08
17	1	Zylinderstift o 2,5 x 14 Cylindrical pin o 2.5 x 14	25.06.8208
18	1	Potentiometer mit Mutter Potentiometer with nut	58.99.0110
19	1	Tellerfeder K Spring washer K	37.02.0105
20	2	Sechskant-Schraube M4 x 8 Hexagonal screw M4 x 8	21.60.4455
21	3	Sicherungsscheibe Lock washer	24.16.1030
22	3	Schraube M3 x 6 Screw M3 x 6	21.01.0354
23	1	Kupplungs-Gehäuse Connector housing	54.02.0503
24	5	Steckerhülse Contact sleeve	54.02.0412
25	1	Winkel Angle bracket	1.080.142.06
26	1	Mitnehmerscheibe Coupling washer	1.080.142.11


E
D
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33

INDEX	QTY	PART NAME	ORDER NUMBER
D		**Drucktasteneinheit** **push button assembly**	**1.080.260**
1	1	Drucktasten-Support push button mount	1.080.260.01
E		**Drucktaste** **push button**	
2	6	Drucktasten Oberteil push-button — top part	1.080.260.03
3	2	Folie-"Vor" -'Rücklauf symbol, "forward" - "rewind"	1.080.260.14
4	1	Folie - "Play" symbol, "play"	1.080.260.15
5	1	Folie - "Edit" symbol, "edit"	1.080.260.18
6	1	Folie - "Record" symbol, "record"	1.080.260.16
7	1	Folie - "Stop" symbol, "stop"	1.080.260.17
8	6	Blende mask	1.080.260.19
9	6	Drucktaste-Unterteil push-button - lower part	1.080.260.02
10	1	Nullstelltaste Oberteil zeroing button - top part	1.080.260.05
11	1	Folie "0" symbol, "0"	1.080.260.20
12	1	Nullstelltaste Unterteil zeroing button - lower part	1.080.260.04
13	1	Zählerabdeckung timer fascia	1.080.260.07
14	1	Folie - "h.-min-sec." symbol "h-min-sec"	1.080.260.21
15	1	Zählerblende timer mask	1.080.260.06
16	2	Winkel-Mutter clip-on nut	22.16.2501
17	6	Tastenhalter button holder	1.080.260.09
18	6	Benzing Sicherung circlip	24.16.3019
19	6	Kontakthalter contact holder	1.080.270
20	6	Benzing Sicherung circlip	24.16.3032
21	6	Druckfeder pressure spring	1.080.260.12
22	2	Blechschraube KS 10 x 9.522 self-tapping screw KS 10 x 9.522	20.21.7355
23	1	Lagerschiene bearing rail	1.080.260.08

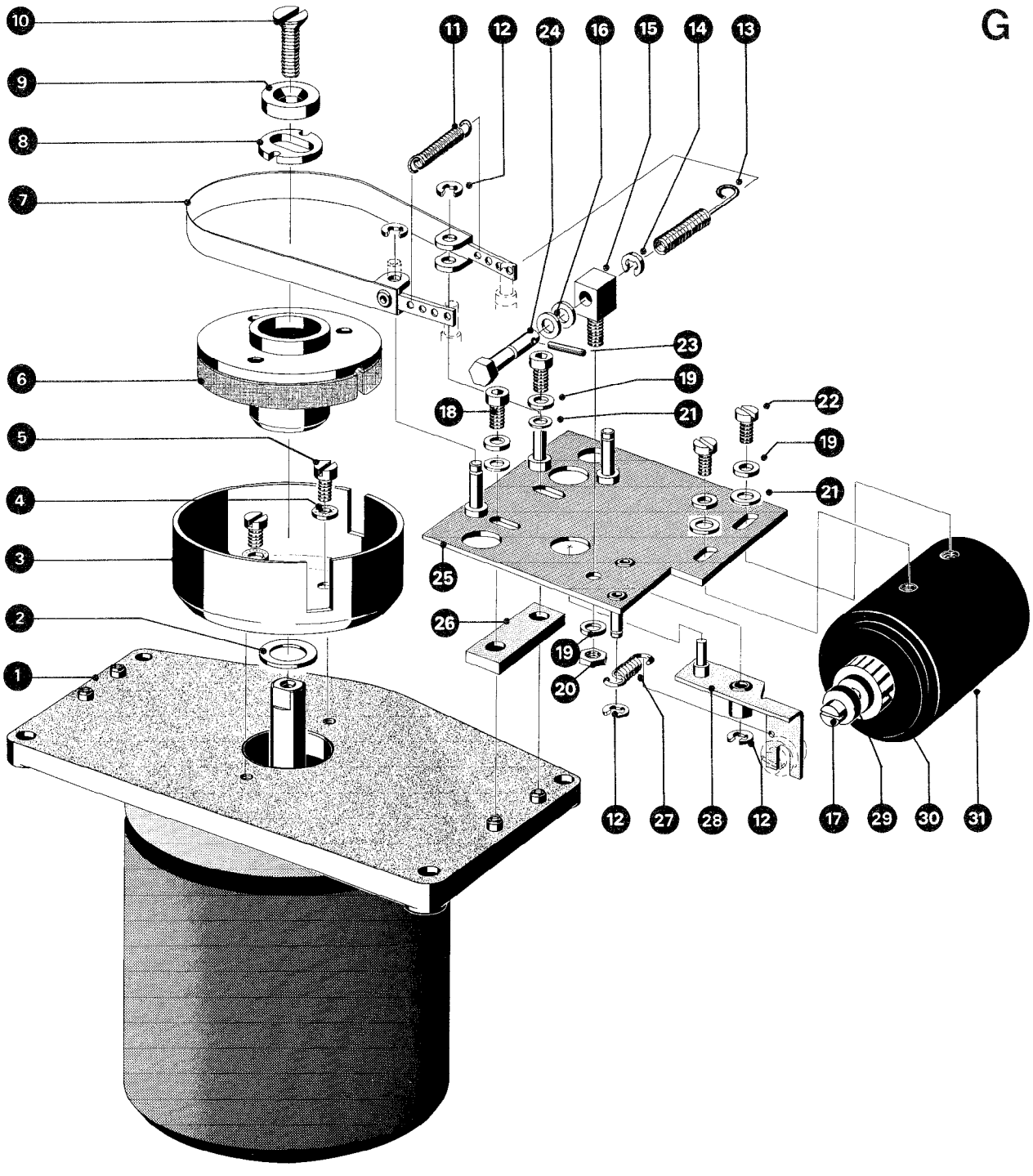
INDEX	QTY	PART NAME	ORDER NUMBER
24	6	Mutterbolzen threaded bolt	1.010.034.27
25	6	Gehäuse zu Schiebekontakt wiper holder	55.02.0101
26	6	Kontaktfeder wiper contact	1.010.001.55
27	6	Glühlampe 24 V 0.04 A lamp 24 V 0.04 A	51.02.0145
28	1	Befehlstastensatz Print bestückt push button print, assembled	1.080.275
29	12	Zylinderschraube M3 x 6 CH screw M3 x 6	21.01.0354
30	12	Sicherungsscheibe lock washer	24.16.1030
31	4	Lasche flap	1.080.260.13
32	4	Sicherungsscheibe lock washer	24.16.1020
33	4	Zylinderschraube M2 x 3 CH screw M2 x 3	21.01.0201

E



INDEX	QTY	PART NAME	ORDER NUMBER
E		**Bandwaage-Rollen-Brücke kompl.** **Tape tension sensor rollers, compl.**	**1.080.450**
	1	Führungsrolle 0,25" kompl. montiert Guide roller 1/4" compl. mounted	1.080.460
1	1	Führungsrolle mit Achse Guide roller with spindle	1.080.456
2	2	Kugellager Ball-race	41.04.0102
3	1	Lagergehäuse Bearing housing	1.080.453.01
4	2	Seeger Innensicherung Retaining ring, internal	24.16.4100
5	2	Tellerfeder Spring washer	37.02.0201
6	1	Distanzscheibe 1/10 mm Spacer shim 1/10 mm	1.080.453.02--03
7	1	Seeger-Aussensicherung Retaining ring, external	24.16.5030
8	*	Distanzscheibe Spacer shim	
	1	Rolle kompl. montiert wie Führungsrolle, jedoch: Roller compl. mounted, same as guide roller compl., except:	1.080.460
9	1	Rolle mit Achse (anstelle 1.080.460) Roller with spindle (in the place of 1.080.460)	1.080.463
10	1	Rollenträger Roller support	1.080.450.01
11	6	Schraube Screw	21.01.0354
12	6	Sicherungsscheibe Lock washer	24.16.1030

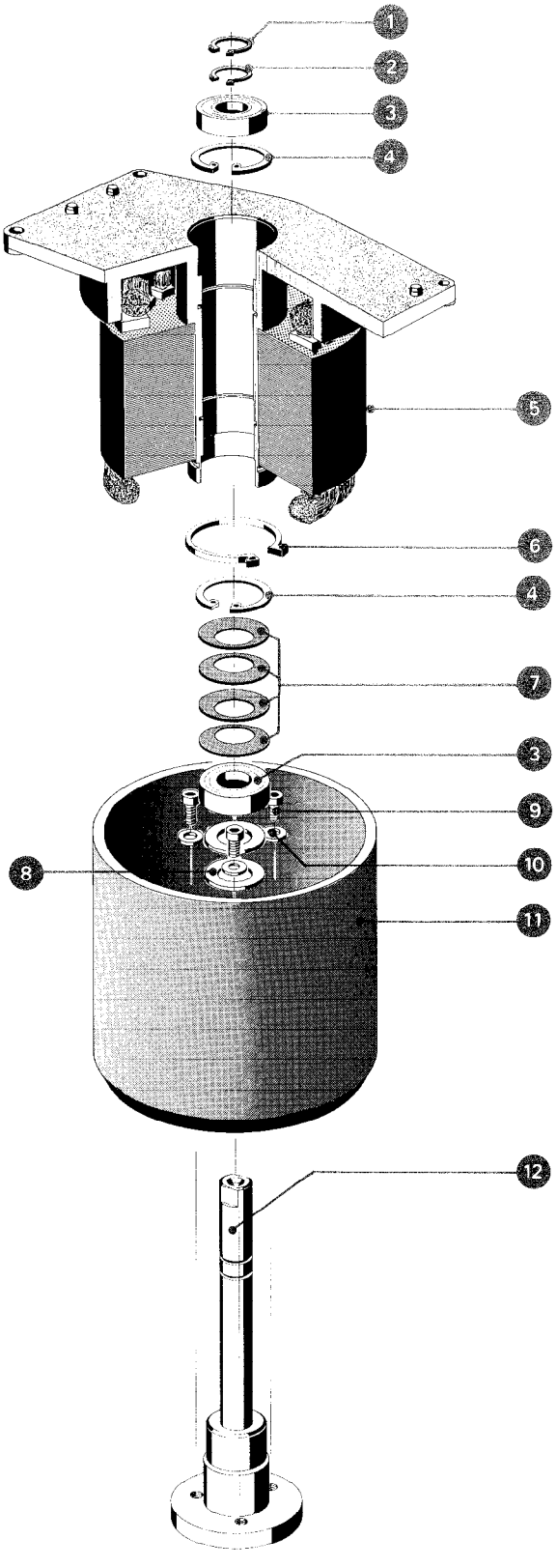
G


10
9
8
7
6
5
4
3
2
1
11
12
24
16
15
14
13
23
19
18
21
22
19
21
25
26
19
20
12
27
28
12
17
29
30
31

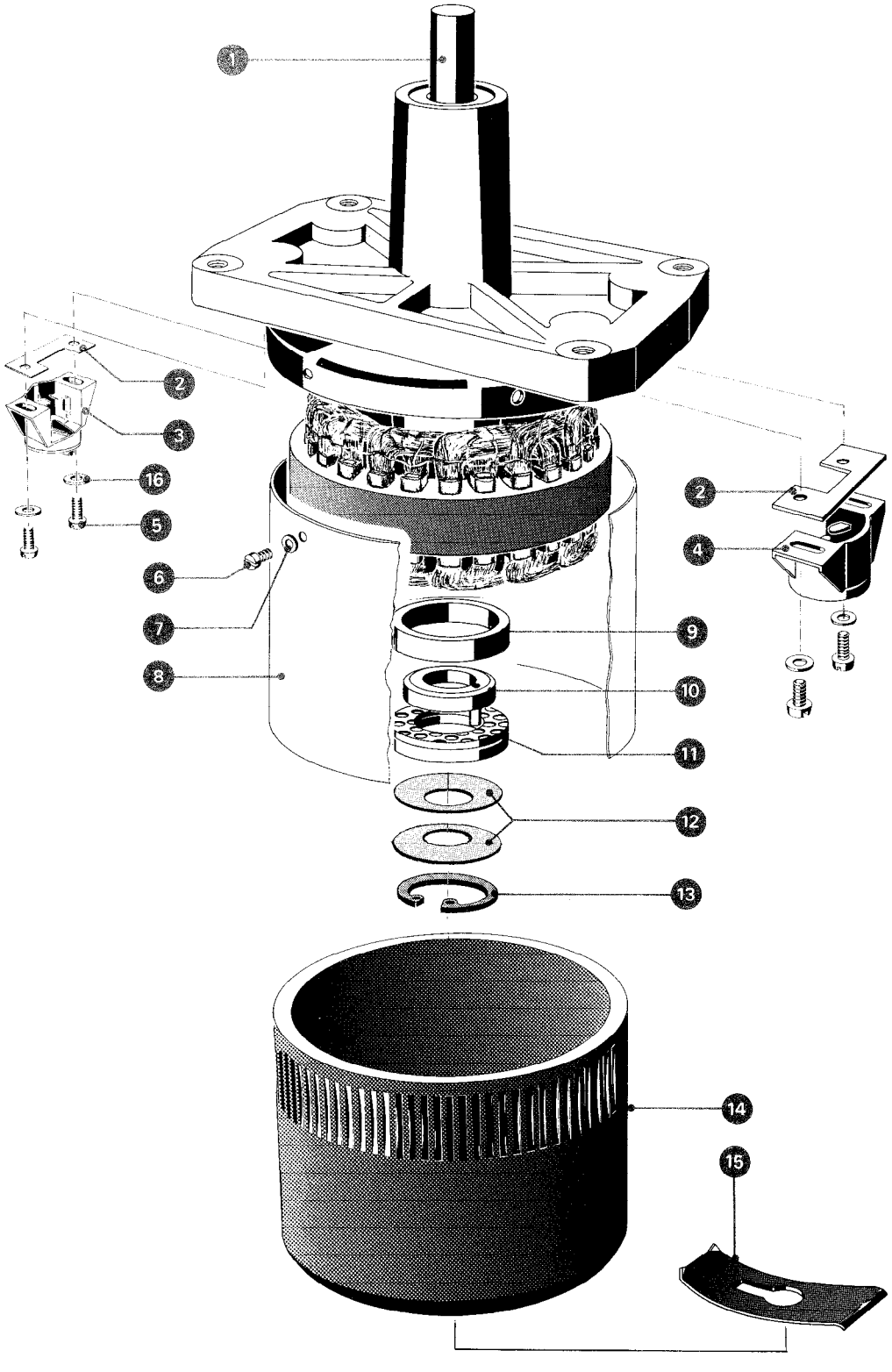
INDEX	QTY	PART NAME	ORDER NUMBER
G		**Wickelmotor und Bremsen** **Spooling motor and brakes**	
1	1	Wickelmotor kompl. Spooling motor compl.	1.021.240
2		Distanzscheibe Spacer shim	1.080.530.06–10
3	1	Schutzhaube Protective hood	1.080.105.03
4	2	Sicherungsscheibe Lock washer	24.16.1030
5	2	Schraube M3 x 5 Screw M3 x 5	21.01.0353
6	1	Bremsrolle kompl. Brake drum compl.	1.080.250
7	1	Bremsband kompl. Brake band compl.	1.080.238
8	1	Mitnehmerscheibe Coupling washer	2.080.105.07
9	1	Pressring Clamp ring	1.080.105.08
10	1	Senkschraube IS M4 x 12 Counter-sunk screw IS M4 x 12	21.53.2457
11	1	Zugfeder Tension spring	1.080.230.05
12	2	Benzing-Sicherung Circlip	24.16.3032
		Bremschassis links kompl. Brake chassis left, compl.	1.080.230
		Bremschassis rechts kompl. Brake chassis right, compl.	1.080.240
13	1	Zugfeder für 0,25" Tension spring for 1/4"	1.080.230.06

INDEX	QTY	PART NAME	ORDER NUMBER
14	3	Benzing-Sicherung Circlip	24.16.3032
15	1	Lager-Bolzen Support bolt	1.080.230.01
16	2	Tellerfeder K Spring washer K	37.01.0102
17	1	Mitnehmerschraube Coupling screw	1.014.753.01
18	2	Schraube IS M4 x 8 Screw IS M4 x 8	21.53.0455
19	5	Sicherungsscheibe Lock washer	24.16.1040
20	1	Sechskant Mutter Hexagonal nut	22.01.8040
21	4	U-Scheibe Washer	23.01.1043
22	2	Schraube M4 x 6 Screw M4 x 6	21.53.0454
23	1	Schwerspannhülse Spring pin	25.16.2106
24	1	Einstellbolzen Adjusting bolt	1.080.230.02
25	1	Bremschassis links Brake chassis left	1.080.233
	1	Bremschassis rechts Brake chassis right	1.080.243
26	1	Distanzplatte Spacer plate	1.080.105.21
27	1	Zugfeder Tension spring	1.080.230.04
28	1	Bremshebel Brake lever	1.080.236

INDEX	QTY	PART NAME	ORDER NUMBER
29	2	Anschlagscheibe End-stop washer	1.080.170.03
30	1	Anker Solenoid plunger	1.014.753
31	1	Magnet Solenoid	1.014.750

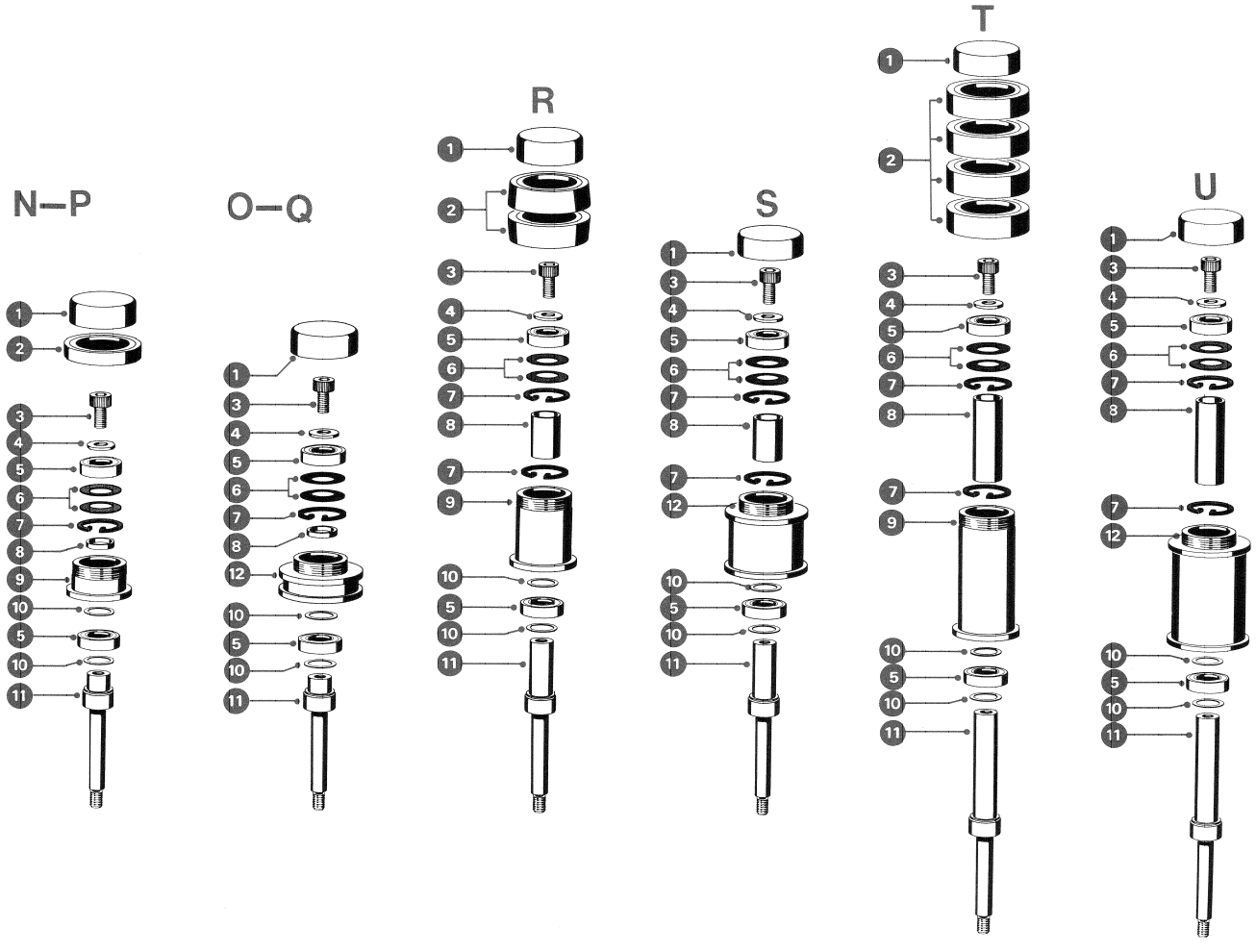

1
2
3
4
5
6
4
7
3
9
8
10
11
12

INDEX	QTY	PART NAME	ORDER NUMBER
H		**Wickelmotor kompl.** **Spooling motor compl.**	**1.021.240**
1	1	Seeger-Ring geschliffen Circlip surface ground	1.021.240.06
2	1	Seeger-Aussensicherung Retaining ring, external	24.16.5280
3	2	Miniaturkugellager Miniature ball-race	41.99.0103
4	2	Seeger-Innensicherung Retaining ring, internal	24.16.4220
5	1	Lagerflansch mit Stator Bearing flange with stator	1.021.240.01+03
6	1	Seeger-Aussensicherung Retaining ring, external	24.16.5280
7	4	Tellerfeder K Spring washer K	37.02.0106
8		Distanzscheibe Spacer shim	1.080.530.06–10
9	3	Schraube M4 x 10 Screw M4 x 10	21.53.0456
10	3	Sicherungsscheibe Lock washer	24.16.1040
11	1	Rotor Rotor	1.021.240.05
12	1	Wickelmotorachse Spooling motor spindle	1.021.241


1
2
3
16
5
6
7
8
2
4
9
10
11
12
13
14
15

INDEX	QTY	PART NAME	ORDER NUMBER
I		**Capstanmotor 1/4" kompl.** **Capstan motor compl.**	**1.021.170**
1	1	Capstanachse 1/4", 19/38 cm/s Capstan shaft 1/4", 7 1/2 / 15 ips	1.021.170.01
2	2	Unterlage zu Abtaster Base to scanner head	1.077.200.04
3	1	Abtaster links Scanner head left	1.021.146
4	1	Abtaster rechts Scanner head right	1.021.176
5	4	Schraube Nylon M3 x 6 Screw nylon M3 x 6	21.99.0117
6	4	Schraube Screw	21.01.0353
7	4	Sicherungs-Scheibe Lock washer	24.16.1030
8	1	Abschirmmantel kompl. Magnetic shield skirt, compl.	1.021.122
9	1	Distanzring Spacer ring	1.021.160.08
10	1	Kammlager Thrust-bearing	1.021.163
11	1	Anlaufscheibe Low friction washer	1.021.160.09
12	2	Tellerfeder Spring washer	37.02.0106
13	1	Seeger-Innensicherung Retaining ring, internal	24.16.4220

INDEX	QTY	PART NAME	ORDER NUMBER
14	1	Rotor Rotor	1.021.161
15	1	Wellensicherung Spindle securing clip	1.021.160.10
16	4	U-Scheibe Washer	23.01.1032

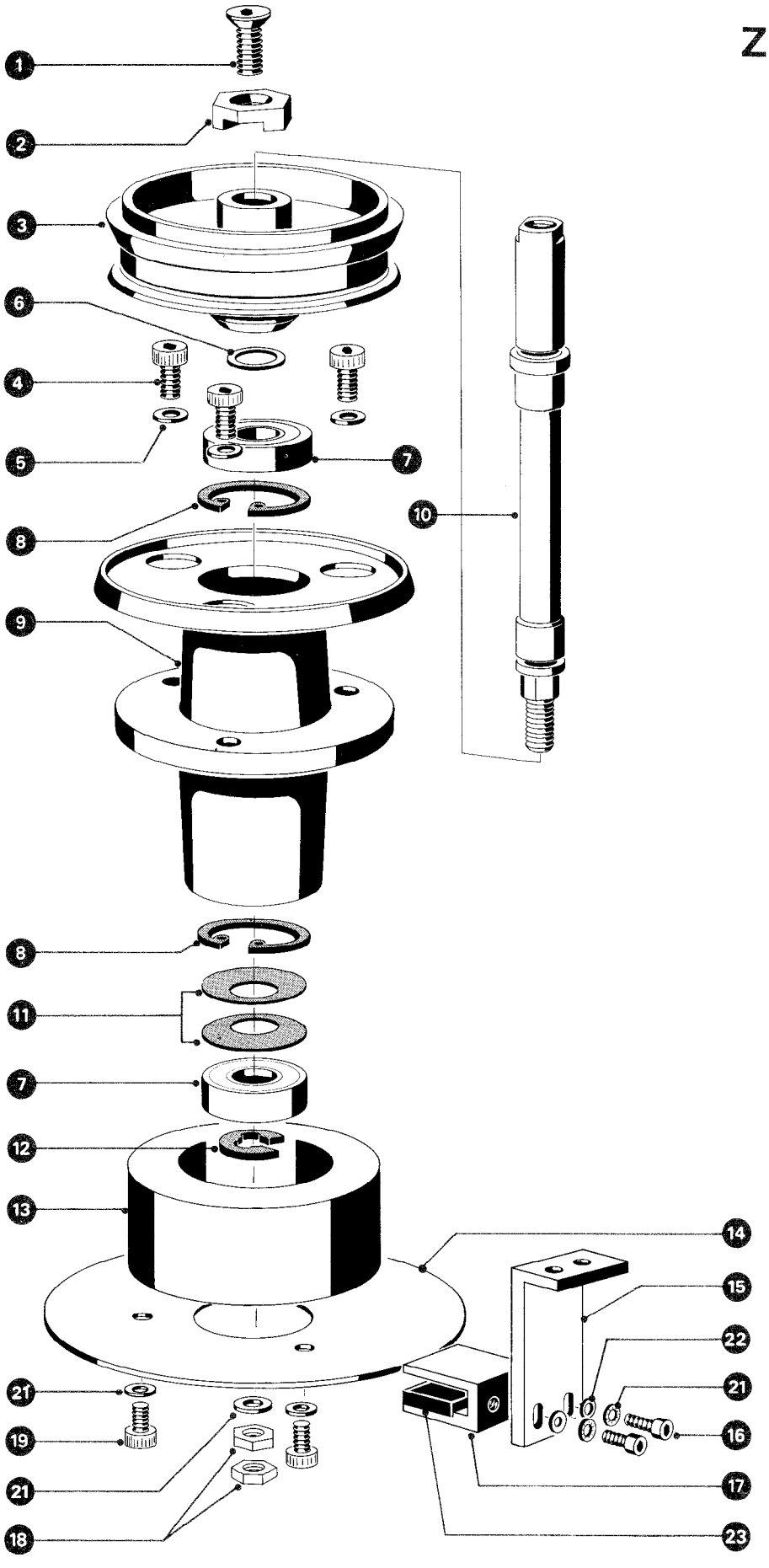

N—P
O—Q
R
S
T
U

INDEX	QTY	PART NAME	ORDER NUMBER
N		**Andruckrolle kompl. 0.25"** **pinch roller, complete, 1/4"**	**1.080.550**
1	1	Abschlussmutter cover nut	1.080.530.05
2	1	Andruckrolle 0.25" pinch roller 1/4"	1.080.550.04
3	1	Zylinderschraube IS M4 x 8 CH screw IS M4 x 8	21.53.0455
4	1	U-Scheibe washer	23.01.3043
5	2	Miniatur-Kugellager miniature ball-race	41.99.0103
6	2	Tellerfeder K spring washer K	37.02.0206
7	1	Seeger-Innensicherung retaining ring, internal	24.16.4220
8	1	Distanzhülse spacer sleeve	1.080.530.03
9	1	Lagergehäuse 0.25" bearing housing 1/4"	1.080.550.01
10	3	Distanzscheibe spacer shim	1.080.530.06-10
11	1	Achse 0.25" spindle 1/4"	1.080.530.02
O		**Vorberuhigungsrolle kompl. 0.25"** **stabilizer roller complete 1/4"**	**1.080.530**
1	1	Abschlussmutter cover nut	1.080.530.05
3	1	Zylinderschraube IS M4 x 8 CH screw IS M4 x 8	21.53.0455
4	1	U-Scheibe washer	23.01.3043
5	2	Miniatur-Kugellager miniature ball-race	41.99.0103
6	2	Tellerfeder K spring washer K	37.02.0206
7	1	Seeger-Innensicherung retaining ring, internal	24.16.4220
8	1	Distanzhülse spacer sleeve	1.080.530.03
10	3	Distanzscheibe spacer shim	1.080.530.06-10
11	1	Achse 0.25" spindle 1/4"	1.080.530.02
12	1	Vorberuhigungsrolle 0.25" stabilizer roller 1/4"	1.080.530.01

INDEX	QTY	PART NAME	ORDER NUMBER
P		**Andruckrolle kompl. 0.5"** **pinch roller, complete, 1/2"**	**1.080.560**
1	1	Abschlussmutter cover nut	1.080.530.05
2	1	Andruckrolle 0.5" pinch roller 1/2"	1.080.560.04
3	1	Zylinderschraube IS M4 x 8 CH screw IS M4 x 8	21.53.0455
4	1	U-Scheibe washer	23.01.3043
5	2	Miniatur-Kugellager miniature ball-race	41.99.0103
6	2	Tellerfeder K spring washer K	37.02.0206
7	1	Seeger-Innensicherung retaining ring, internal	24.16.4220
8	1	Distanzhülse 0.5" spacer sleeve 1/2"	1.080.535.03
9	1	Lagergehäuse 0.5" bearing housing 1/2"	1.080.560.01
10	3	Distanzscheibe spacer shim	1.080.530.06-10
11	1	Achse 0.5" spindle 1/2"	1.080.535.02
Q		**Vorberuhigungsrolle kompl. 0.5"** **stabilizer roller complete 1/2"**	**1.080.535**
1	1	Abschlussmutter cover nut	1.080.530.05
3	1	Zylinderschraube IS M4 x 8 CH screw IS M4 x 8	21.53.0455
4	1	U-Scheibe washer	23.01.3043
5	2	Miniatur-Kugellager miniature ball-race	41.99.0103
6.	2	Tellerfeder K spring washer K	37.02.0206
7	1	Seeger-Innensicherung retaining ring, internal	24.16.4220
8	1	Distanzhülse spacer sleeve	1.080.530.03
10	3	Distanzscheibe spacer shim	1.080.530.06-10
11	1	Achse 0.5" spindle 1/2"	1.080.535.02
12	1	Vorberuhigungsrolle 0.5" stabilizer roller 1/2"	1.080.535.01

INDEX	QTY	PART NAME	ORDER NUMBER
R		**Andrucksrolle kompl. 1"** **pinch roller, complete, 1"**	**1.080.565**
1	1	Abschlussmutter cover nut	1.080.530.05
2	2	Andruckrolle pinch roller	1.080.560.04
3	1	Zylinderschraube IS M4 x 8 CH screw IS M4 x 8	21.53.0455
4	1	U-Scheibe washer	23.01.3043
5	2	Miniatur-Kugellager miniature ball-race	41.99.0103
6	2	Tellerfeder K spring washer K	37.02.0206
7	2	Seeger Innensicherung retaining ring, internal	24.16.4220
8	1	Distanzhülse 1" spacer sleeve 1"	1.080.540.03
9	1	Lagergehäuse 1" bearing housing 1"	1.080.565.01
10	3	Distanzscheibe spacer shim	1.080.530.06-10
11	1	Achse 1" spindle 1"	1.080.540.02
S		**Vorberuhigungsrolle kompl. 1"** **stabilizer roller complete 1"**	**1.080.540**
1	1	Abschlussmutter cover nut	1.080.530.05
3	1	Zylinderschraube IS M4 x 8 CH screw IS M4 x 8	21.53.0455
4	1	U-Scheibe washer	23.01.3043
5	2	Miniaturkugellager miniature ball-race	41.99.0103
6	2	Tellerfeder K spring washer K	37.02.0206
7	1	Seeger Innensicherung retaining ring, internal	24.16.4220
8	1	Distanzhülse spacer sleeve	1.080.530.03
10	3	Distanzscheibe spacer shim	1.080.530.06-10
11	1	Achse 1" spindle 1"	1.080.540.02
12	1	Vorberuhigungsrolle 1" stabilizer roller 1"	1.080.540.01

INDEX	QTY	PART NAME	ORDER NUMBER
T		**Andruckrolle kompl. 2"** **pinch roller, complete, 2"**	**1.080.570**
1	1	Abschlussmutter cover nut	1.080.530.05
2	4	Andruckrolle pinch roller	1.080.560.04
3	1	Zylinderschraube IS M4 x 8 CH screw IS M4 x 8	21.53.0455
4	1	U-Scheibe washer	23.01.3043
5	2	Miniaturkugellager miniature ball-race	41.99.0103
6	2	Tellerfeder K spring washer K	37.02.0206
7	2	Seeger Innensicherung retaining ring, internal	24.16.4220
8	1	Distanzhülse 2" spacer sleeve 2"	1.080.545.03
9	1	Lagergehäuse 2" bearing housing 2"	1.080.570.01
10	2	Distanzscheibe Spacer shim	1.080.530.06-10
11	1	Achse 2" spindle 2"	1.080.545.02
U		**Vorberuhigungsrolle kompl. 2"** **stabilizer roller complete 2"**	**1.080.545**
1	1	Abschlussmutter cover nut	1.080.530.05
3	1	Zylinderschraube IS M4 x 8 cylinder screw IS M4 x 8	21.53.0455
4	1	U-Scheibe washer	23.01.3043
5	2	Miniaturkugellager miniature ball-race	41.99.0103
6	2	Tellerfeder K spring washer K	37.02.0206
7	1	Seeger Innensicherung retaining ring, internal	24.16.4220
8	1	Distanzhülse spacer sleeve	1.080.530.03
10	3	Distanzscheibe spacer shim	1.080.530.06-10
11	1	Achse 2" spindle 2"	1.080.545.02
12	1	Vorberuhigungsrolle 2" stabilizer roller 3"	1.080.545.01


1
2
3
6
4
5
7
10
8
9
8
11
7
12
13
14
15
22
21
16
17
23
21
19
21
18

INDEX	QTY	PART NAME	ORDER NUMBER
Z		**Linkes Umlenkrollenlager** **left hand guide roller bearing**	
1	1	Senkschraube IS counter-sunk screw IS	21.53.2457
2	1	Mitnehmerscheibe clamp	1.080.105.04
3	1	Umlenkrolle links 0.25" guide roller left 1/4"	1.080.440.02
3	1	Unlenkrolle links 0.5" guide roller left 1/2"	1.080.442.02
3	1	Umlenkrolle links 1" guide roller left 1"	1.080.444.02
3	1	Umlenkrolle links 2" guide roller left 2"	1.080.446.02
4	3	Zylinderschraube M4 x 12 CH screw M4 x 12	21.53.0457
5	3	Sicherungsscheibe lock washer	24.16.1040
		Umlenkrolle links kompl. **guide roller left, complete**	**1.080.196**
6		Distanzscheibe spacer shim	1.080.530.06-10
7	2	Miniaturkugellager miniature ball-race	41.99.0103
8	2	Seeger Innensicherung retaining ring, internal	24.16.4220
9	1	Lagergehäuse kompl. bearing housing, complete	1.080.205
10	1	Welle spindle	1.080.196.01
11	2	Tellerfeder K spring washer K	37.02.0206
12	1	Seeger-Aussensicherung retaining ring, external	24.16.5100
13	1	Schwungmasse flywheel	1.080.105.22
14	1	Bremsscheibe brake disk	1.080.105.39
15	1	Magnethalter magnet holder	1.080.105.40
16	2	Zylinderschraube M3 x 8 CH screw M3 x 8	21.01.3555
17	1	Magnetbügel magnet bracket	1.080.105.41
18	2	Mutter nut	22.01.5050
19	3	Zylinderschraube M3 x 5 CH screw M3 x 5	21.01.0353
20	1	U-Scheibe washer	23.01.2053
21	5	Sicherungsscheibe lock washer	24.16.1030

INDEX	QTY	PART NAME	ORDER NUMBER
22	2	U-Scheibe washer	23.01.1032
23	1	Magnet ferit magnet	61.99.0121