

EXCHANGE OF SWITCHING CODE PCB

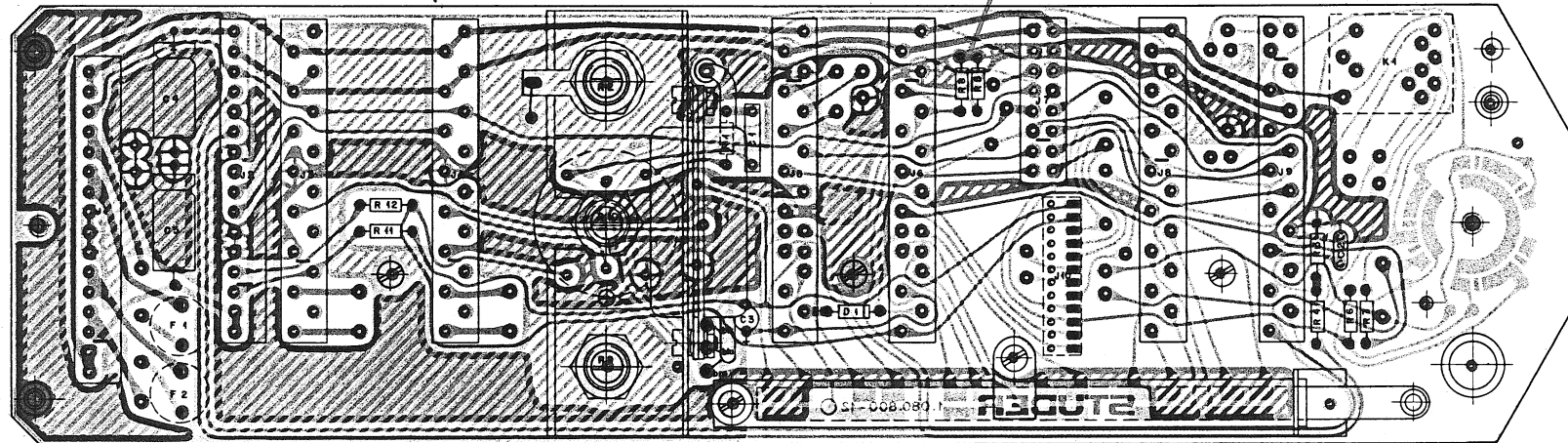
- 1) Unplug all wires fo the back of the audio amplifier.
- 2) Unscrew the 2 knurled screws of the back of the audio amplifier and remove amplifier.
- 3) Open top cover (4 screws on the back and one screw on each side).
- 4) Remove the reproduce adjustment plug-in and the record adjustment plug-in.
- 5) Remove all the audio PCB's.
- 6) Remove the remaining small switching code PCB and plug-in the new 1.081.815.00 switching code PCB (see drawing 1).
- 7) Solder the black wire of the switching code PCB 1.081.815.00 to either R5 or R8 on mother board ground side (see drawing 2 and 3).
- 8) For 7,5/15 ips tape recorders:  
Remove R8 of the synch equalizer PCB 1.080.816.00 (see drawing 3 and 4).  
For 15/30 ips tape recorders:  
Remove R5 of the synch equalizer PCB 1.080.817.00 (see drawing 3 and 5).
- 9) Please note:  
If your previous switching code PCB was 1.080.811.00 the following modification must be done:  
For 7,5/15 ips tape recorders:  
Remove bridge of R21 on reproduce equalizer PCB 1.080.814.00 and solder-in a resistor of 1k0hm (see drawing 6 and 7).  
For 15/30 ips tape recorders:  
Remove bridge of R5 on reproduce equalizer PCB 1.080.815.00 and solder-in a resistor of 1k0hm (see drawing 6 and 8).
- 10) Insert all PCB's back to the amplifier case according to drawing 1.
- 11) Plug-in the reproduce and the record adjustment plug-in's.
- 12) Mount amplifier back into penthouse and connect all cables.
- 13) Start with the next amplifier.



Drawing 2

CHANNEL BASIS CIRCUIT 1.080.800

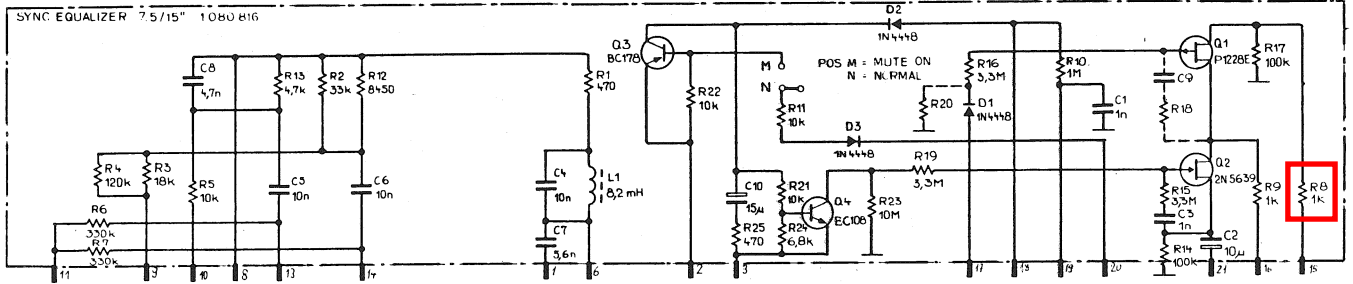
Connect the black wire from Switching Code PCB to ground at either R5 or R6



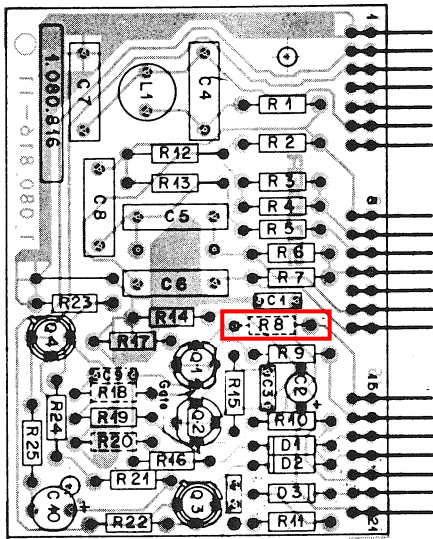


Drawing 4

SYNC EQUALIZER PCB 7.5"/15" 1.080.816



REMOVE R8 IF SWITCHING CODE 1.081.815 IS USED



JUMPER POS :

- — NORMAL
- — MUTE ON

Pos.	Bauteil No.	Bezeichnung	Sik.	Bemerkung
C 01	59.32.4102	C 1.0N, 20% 63V	KER	1
C 02	59.30.4100	C 10U, 16V	TA	1
C 03	59.32.4102	C 1.0N, 63V	KER	1
C 04	59.11.3103	C 10N, 5% 160V	PC	1
C 05	59.11.4103	C 10N, 2.5%	PV	1
C 06	59.11.4103	C 10N,		1
C 07	59.11.3562	C 5.6N, 5%	PC	1
C 08	59.11.4472	C 4.7N, 2.5%		1
C 09		nicht bestückt		
C 10	59.36.4150	C 15U, 25V	TA	1
D 01	50.04.0125	D 1 N 4448	SI	1
D 02	50.04.0125	D 1 N 4448		1
D 03	50.04.0125	D 1 N 4448		1
L 01	62.02.1822	L 8.2M, 5% 8 D		1
Q 01	50.03.0329	Q P 1228 E		1
Q 02	50.03.0331	Q 2 N 5639	NDFET	1
Q 03	50.03.0306	Q BC 178 B	PNP	1
Q 04	50.03.0409	Q BC 108 B	NPN	1
R 01	57.41.4471	R 470, 5% .25W	CSCH	1
R 02	57.41.4333	R 33K,		1
R 03	57.41.4183	R 18K,		1
R 04	57.41.4124	R 120K,		1
R 05	57.41.4103	R 10K,		1
R 06	57.41.4334	R 330K,		1
R 07	57.41.4334	R 330K,		1
R 08	(57.41.4102	R 1.0K, nur f. Sonderausführung		1 bestückt)
R 09	57.41.4102	R 1.0K,		1

Anderungen ① B. 2.77 22 ② 25.6.79 ③ ④ ⑤

STUDER REGENSDORF ZÜRICH	Positionenliste Sync-Entzerrung 7.5"/15"	Erstellt: 14.5.76 P.B./gv
		Geprüft: 11. MAI 1976 22
Kopie für:		Blatt: 1 Blätter: 2
Ersatz für:		1.080.816
Ersetzt durch:		

Pos.	Bauteil No.	Bezeichnung	Sik.	Bemerkung
R 10	57.41.4105	R 1.0 M, 5% .25W	CSCH	1
R 11	57.41.4103	R 10 K,		1
R 12	57.39.8451	R 8450, 1% D2.5	MP	1
R 13	57.39.4701	R 4700		1
R 14	57.41.4104	R 100 K, 5% .25W	CSCH	1
R 15	57.02.5335	R 3.3 M, 10%	CMA	1
R 16	57.02.5335	R 3.3 M,		1
R 17	57.41.4104	R 100 K, 5%	CSCH	1
R 18		nicht bestückt		
R 19	57.02.5335	R 3.3 M, 10%	CMA	1
R 20		nicht bestückt		1
R 21	57.41.4103	R 10 K, 5%	CSCH	1
R 22	57.41.4103	R 10 K,		1
R 23	57.02.5106	R 10 M, 10%	CMA	1
R 24	57.41.4682	R 6.8 K, 5%	CSCH	1
R 25	57.41.4471	R 470,		1

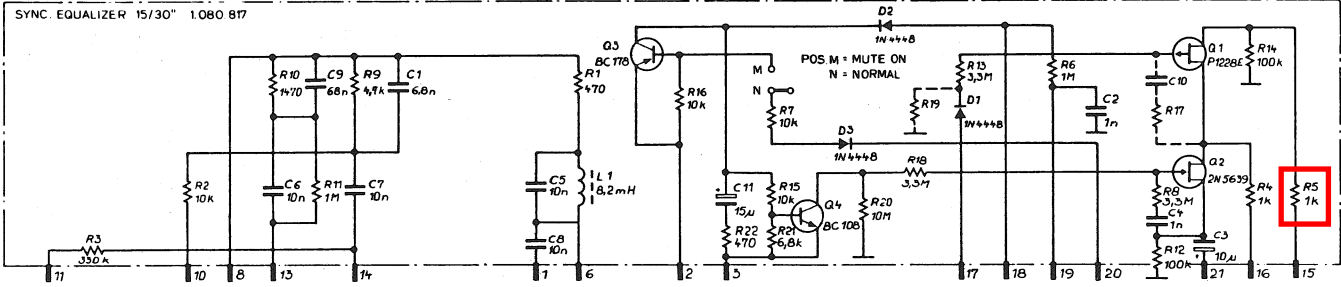
Anderungen ① B. 2.77 22 ② 25.6.79 ③ ④ ⑤

STUDER REGENSDORF ZÜRICH	Positionenliste Sync-Entzerrung 7.5"/15"	Erstellt: 14.5.76 P.B./gv
		Geprüft: 2. JUN 1977 22
Kopie für:		Blatt: 2 Blätter: 2
Ersatz für:		1.080.816
Ersetzt durch:		

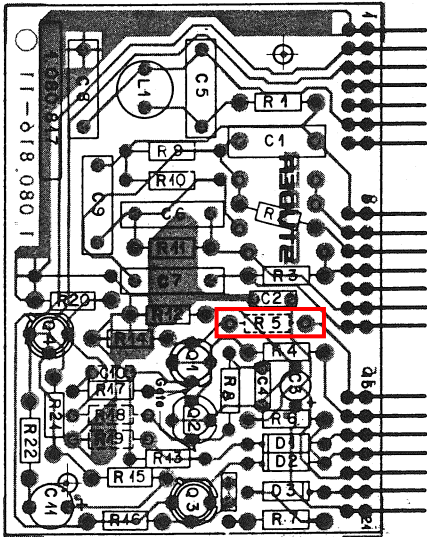


*Drawing 5*

SYNC EQUALIZER PCB 15"/30" 1.080.817



REMOVE R5 IF SWITCHING CODE PCB 1.081.815 IS USED



JUMPER POS :

□ - NORMAL  
○ - MUTE ON

Pos.	Bauteil No.	Bezeichnung	Stk	Bemerkung
C 01	59.11.3682	C 6.8N, 5% 160V	PC 1	
C 02	59.32.4102	C 1.0N, 20% 63V	KER 1	
C 03	59.30.4100	C .10U, 16V	TA 1	
C 04	59.32.4102	C 1.0N, 63V	KER 1	
C 05	59.11.3103	C 10N, 5% 160V	PC 1	
C 06	59.11.4103	C 10N, 2.5%	PV 1	
C 07	59.11.4103	C 10N,		
C 08	59.11.3103	C 10N, 5%	PC 1	
C 09	59.31.6683	C 6.8N, 10% 100V	PETP 1	
C 10		nicht bestückt		
C 11	59.36.4150	C 15U, 25V	TA 1	
D 01	50.04.0125	D 1 N 4448	SI 1	
D 02	50.04.0125	D 1 N 4448		
D 03	50.04.0125	D 1 N 4448		
L 01	62.02.1822	L 8.2M, 5% 8 D		
Q 01	50.03.0329	Q P 1228 E		
Q 02	50.03.0331	Q 2 N 5639	NDFET 1	
Q 03	50.03.0306	Q BC 178 B	PNP 1	
Q 04	50.03.0409	Q BC 108 B	NPN 1	
R 01	57.41.4471	R 470, 5% .25W	CSCH 1	
R 02	57.41.4103	R 10K,		
R 03	57.41.4334	R 330K,		
R 04	57.41.4102	R 1.0K,		
R 05	57.41.4102	R 1.0K, nur f. Sonderausführung	1	bestückt
R 06	57.41.4105	R 1.0M,		
R 07	57.41.4103	R 10K,		
R 08	57.02.5335	R 3.3M, 10%	CMA 1	

Anderungen ① 8.2.77 ② 25.6.79 ③ ④ ⑤

<b>STUDER</b>	<b>Positionsliste</b>	Erstellt: 14.5.76 P.B./gv
REGENDORF	Sync-Entzerrung 15"/30"	Geprüft: 18. MAI 87 P.P.
ZÜRICH		Blatt: 1 Blatt 2

Kopie für: Ersatz für: Ersetzt durch: 1.080.817

Pos.	Bauteil No.	Bezeichnung	Stk	Bemerkung
R 09	57.39.4701	R 4700, 1% D2.5	MF 1	
R 10	57.39.1471	R 1.47K,		
R 11	57.41.4105	R 1.0M, 5% .25W	CSCH 1	
R 12	57.41.4104	R 100K,		
R 13	57.02.5335	R 3.3M, 10%	CMA 1	
R 14	57.41.4104	R 100K, 5%	CSCH 1	
R 15	57.41.4103	R 10K,		
R 16	57.41.4103	R 10K,		
R 17		nicht bestückt		
R 18	57.02.5335	R 3.3M,		
R 19		nicht bestückt		
R 20	57.02.5106	R 10M, 10%	CMA 1	
R 21	57.41.4682	R 6.8K,		
R 22	57.41.4471	R 470,		

Anderungen ① 8.2.77 ② 25.6.79 ③ ④ ⑤

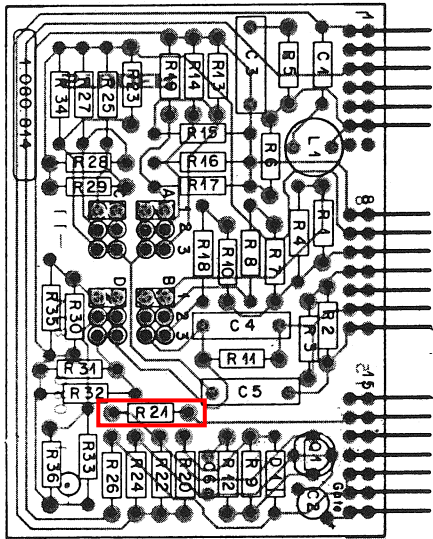
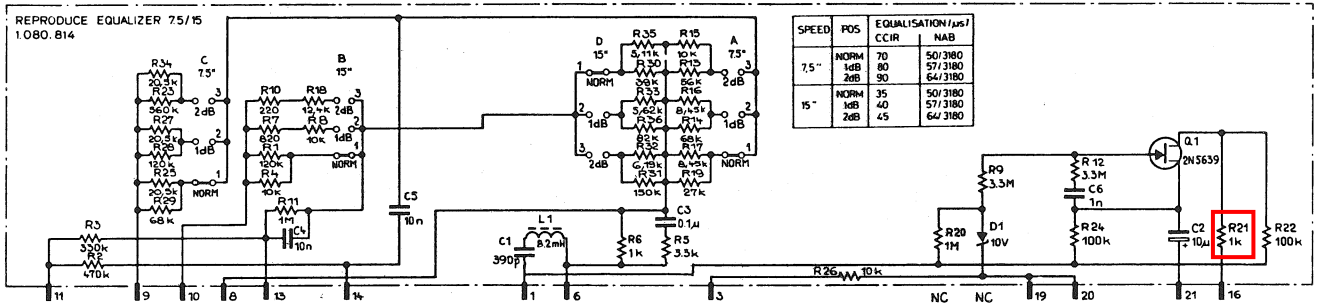
<b>STUDER</b>	<b>Positionsliste</b>	Erstellt: 14.5.76 P.B./gv
REGENDORF	Sync-Entzerrung 15"/30"	Geprüft: 18. MAI 87 P.P.
ZÜRICH		Blatt: 2 Blatt 2

Kopie für: Ersatz für: Ersetzt durch: 1.080.817



Drawing 7

REPRODUCE EQUALIZER PCB 7.5"/15" 1.080.814



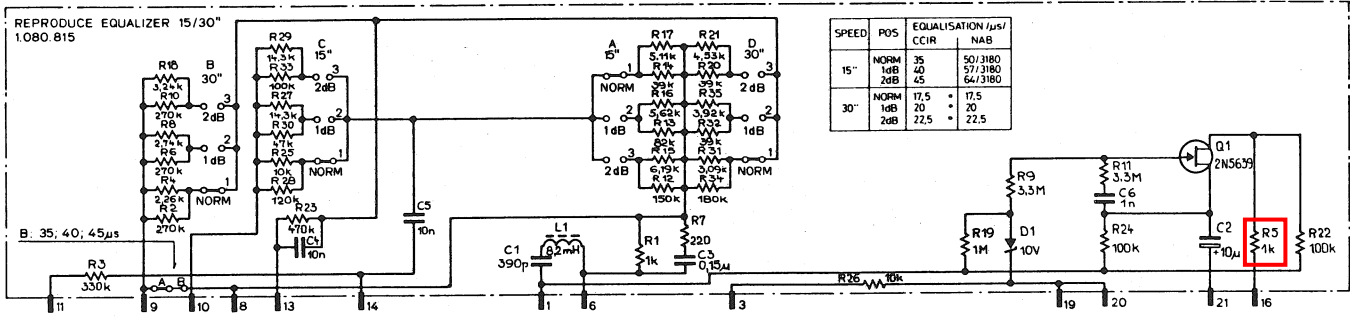
POS NO	PART NO	VALUE	SPECIFICATIONS	EQUIVALENT	MFR
C 1	59.04.7391	390 pF	5% 63V	PS	
C 2	59.30.4100	10 μF	20% 16V	TA	
C 3	59.31.9104	0,1 μF	10% 160V	MPBTP	
C 4	59.11.4103	10 nF	2,5% 160V	PV	
C 5	59.11.4103	10 nF	2,5% 160V	PV	
C 6	59.32.4102	1 nF	20% 63V	KER	
D 1	50.04.1114	10 V Z	5% 0,4W		
L 1	62.02.1822	8,2 mH	5%		
Q 1	50.03.0331	2N5639			
R 1	57.41.4124	120 k	5% .25W	CSCH	
R 2	57.41.4474	470 k	5% .25W	CSCH	
R 3	57.41.4334	330 k	5% .25W	CSCH	
R 4	57.39.1002	10,0 k	1% .25W	MP	
R 5	57.41.4332	3,3 k	5% .25W	CSCH	
R 6	57.41.4102	1 k	5% .25W	CSCH	
R 7	57.41.4821	820	5% .25W	CSCH	
R 8	57.39.1002	10,0 k	1% .25W	MP	
R 9	57.02.5335	3,3 M	10% .25W	CMA	
R 10	57.41.4321	220	5% .25W	CSCH	
R 11	57.41.4105	1 M	5% .25W	CSCH	
R 12	57.02.5335	3,3 M	10% .25W	CMA	
R 13	57.41.4563	56 k	5% .25W	CSCH	
R 14	57.41.4683	68 k	5% .25W	CSCH	
R 15	57.39.1002	10,0 k	1% .25W	MP	
R 16	57.39.8451	8,45 k	1% .25W	MP	
R 17	57.39.8451	8,45 k	1% .25W	MP	
R 18	57.39.1242	12,4 k	1% .25W	MP	
R 19	57.41.4273	27 k	5% .25W	CSCH	
R 20	57.41.4105	1 M	5% .25W	CSCH	
R 21	57.41.4102	1 k	5% .25W	CSCH	
R 22	57.41.4104	100 k	5% .25W	CSCH	
R 23	57.41.4564	560 k	5% .25W	CSCH	
R 24	57.41.4104	100 k	5% .25W	CSCH	
R 25	57.39.2052	20,5 k	1% .25W	MP	
R 26	57.41.4103	10 k	5% .25W	CSCH	
R 27	57.39.2052	20,5 k	1% .25W	MP	
R 28	57.41.4124	120 k	5% .25W	CSCH	
R 29	57.41.4683	68 k	5% .25W	CSCH	

POS NO	PART NO	VALUE	SPECIFICATIONS	EQUIVALENT	MFR
R 30	57.41.4393	39k	5% .25W	CSCH	
R 31	57.41.4154	150k	5% .25W	CSCH	
R 32	57.39.6191	6,19k	1% .25W	MP	
R 33	57.39.5621	5,62k	1% .25W	MP	
R 34	57.39.2052	20,5k	1% .25W	MP	
R 35	57.39.5111	5,11k	1% .25W	MP	
R 36	57.41.4823	82k	5% .25W	CSCH	

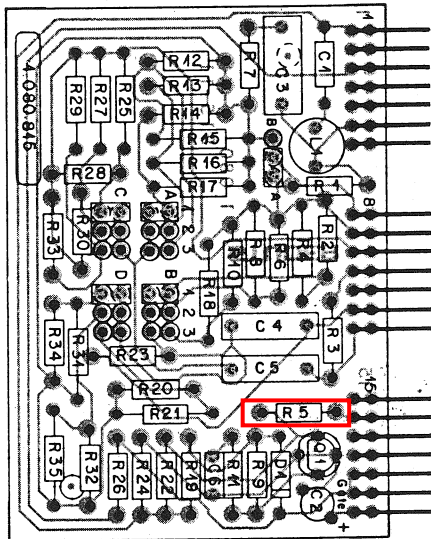


Drawing 8

REPRODUCE EQUALIZER PCB 15"/30" 1.080.815



SPEED	POS	EQUALISATION /μs/ CCIR	NAB
15"	NORM	35	50/3180
	1dB	40	57/3180
	2dB	45	64/3180
30"	NORM	17,5	17,5
	1dB	20	20
	2dB	22,5	22,5



POS NO	PART NO	VALUE	SPECIFICATIONS	EQUIVALENT MFR
C 1	59.04.7391	390 pF	5% 63V PS	
C 2	59.30.4100	10 μF	20% 16V TA	
C 3	59.05.2154	0,15 μF	10% 100V MPC	
C 4	59.11.4103	10 nF	2,5% 160V PC	
C 5	59.11.4103	10 nF	2,5% 160V PC	
C 6	59.32.4102	1 nF	20% 63V KER	
D 1	50.04.1114	10 V Z	5% 0,4W	
L 1	62.02.1822	8,2 mH	5%	
Q 1	50.03.0331	2N5639		
R 1	57.41.4102	1 k	5% .25W CSCH	
R 2	57.41.4274	270 k	5% .25W CSCH	
R 3	57.41.4334	330 k	5% .25W CSCH	
R 4	57.39.2261	2,26 k	1% .25W MF	
R 5	57.41.4102	1 k	5% .25W CSCH	
R 6	57.41.4274	270 k	5% .25W CSCH	
R 7	57.41.4221	220	5% .25W CSCH	
R 8	57.39.2741	2,74 k	1% .25W MF	
R 9	57.02.5335	3,3 M	10% .25W CHA	
R 10	57.41.4274	270 k	5% .25W CSCH	
R 11	57.02.5335	3,3 M	10% .25W CHA	
R 12	57.41.4154	150 k	5% .25W CSCH	
R 13	57.41.4893	82 k	5% .25W CSCH	
R 14	57.41.4393	39 k	5% .25W CSCH	
R 15	57.39.6191	6,19 k	1% .25W MF	
R 16	57.39.5621	5,62 k	1% .25W MF	
R 17	57.39.5111	5,11 k	1% .25W MF	
R 18	57.39.3241	3,24 k	1% .25W MF	
R 19	57.41.4105	1 M	5% .25W CSCH	
R 20	57.41.4393	39 k	5% .25W CSCH	
R 21	57.39.4531	4,53 k	1% .25W MF	
R 22	57.41.4104	100 k	5% .25W CSCH	
R 23	57.41.4474	470 k	5% .25W CSCH	
R 24	57.41.4104	100 k	5% .25W CSCH	
R 25	57.39.1002	10,0 k	1% .25W MF	
R 26	57.41.4103	10 k	5% .25W CSCH	
R 27	57.39.1432	14,3 k	1% .25W MF	
R 28	57.41.4124	120 k	5% .25W CSCH	
R 29	57.39.1432	14,3 k	1% .25W MF	

POS NO	PART NO	VALUE	SPECIFICATIONS	EQUIVALENT MFR
R 30	57.41.4473	47k	5% .25W CSCH	
R 31	57.39.3091	3,09k	1% .25W MF	
R 32	57.41.4393	39k	5% .25W CSCH	
R 33	57.41.4104	100k	5% .25W CSCH	
R 34	57.41.4184	180k	5% .25W CSCH	
R 35	57.39.3921	3,92k	1% .25W MF	