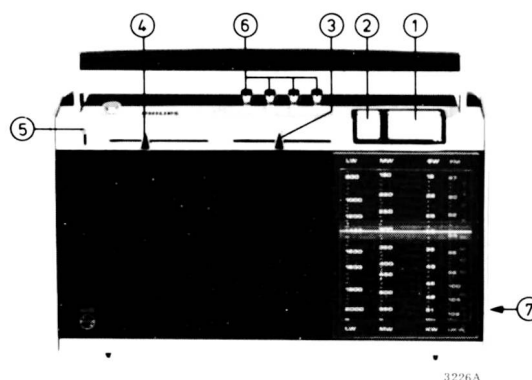


Service manual

RADIO 90RL413

00/15/22



Dimensions: 300 x 180 x 80 mm

PHILIPS



①	Tuning Afstemming Syntonisation Abstimmung Sintonización	VC1a-d	②	Fine tuning Fijnafstemming Réglage fin Feinabstimmung Sintonización fina	C57	③	Tone control Toonregeling Commande de tonalité Klang-Reglung Control de tono	R46
④	Volume control Volumeregeling Commande de volume Lautstärkeregelung Control de volumen	R48	⑤	On/off switch Aan/uit-schakelaar Commutateur marche/arrêt Ein/Aus-Schalter Interruptor	SK-F	⑥	Wave range switch Golfbereikschakelaar Sélecteur de gammes d'onde Wellenbereichschalter Conmutador de márgenas de ondas	SK-A÷D
⑦	Switch PU/Radio Schakelaar PU/Radio Sélecteur PU/Radio Schalter TA/Radio Conmutador tocadiscos/radio	SK-E						

Supply voltage	9 V (6x1.5 V)	Voedingsspanning	Tension d'alimentation	Speisespannung	9 V (6x1.5 V)	Tensión de alimentación
External supply	9 V	Externe voeding	Alimentation externe	Externe Speisung	9 V	Alimentación externa
Consumption FM	27 mA	Verbruik FM	Consommation FM	Verbrauch UKW	27 mA	Consumo FM
(without signal) AM	22 mA	(zonder signaal) AM	(sans signal) AM	(ohne Signal) AM	22 mA	(sin senal) AM
Output power	1 W	Uitgangsvermogen	Puissance de sortie	Ausgangsleistung	1 W	Potencia de salida
Loudspeaker	8 Ω	Luidspreker	Haut-parleur	Lautsprecher	8 Ω	Altavoz
IF-AM -/00	452 kHz	MF-AM -/00	FI-AM -/00	ZF-AM -/00	452 kHz	FI-AM -/00
-/22	460 kHz	-/22	-/22	-/22	460 kHz	-/22
-/15	470 kHz	-/15	-/15	-/15	470 kHz	-/15
IF-FM	10.7 MHz	MF-FM	FI-FM	ZF-UKW	10.7 MHz	FI-FM

LW - LG - GO - LW - OL	: 150 - 260 kHz (2000 - 1150 m)
MW - MG - PO - MW - OM	: 520 - 1605 kHz (577 - 187 m)
SW - KG - OC - KW - OC	: 5.95 - 18.3 MHz (50 - 16 m)
FM - FM - FM - UKW - FM	: 87.5 - 104 MHz







Index: CS37002-CS37007



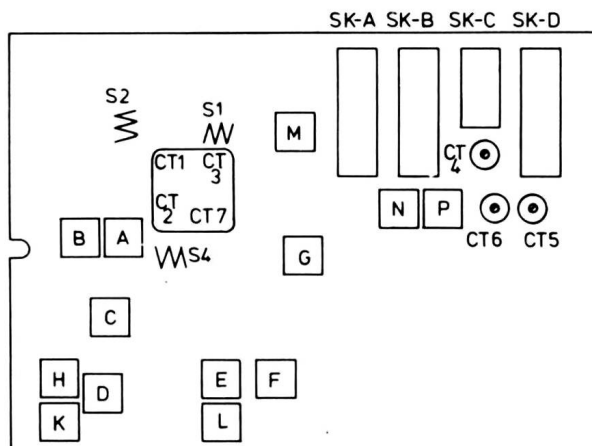
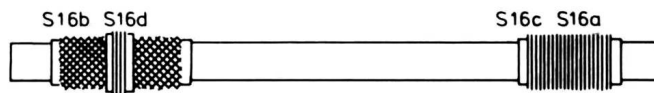
Subject to modification






4822 725 11084

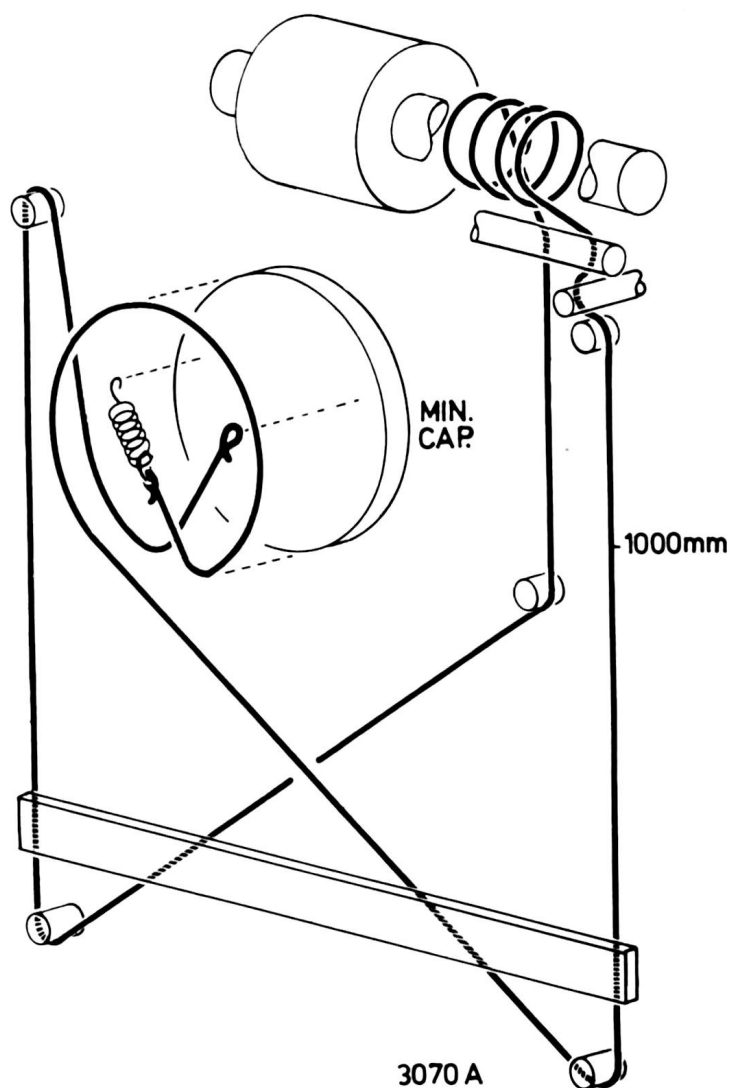
Printed in the Netherlands

Wave range SK....	Signal to 		 Varicap	Detune 	Adjust 	Indication 
MW (520-1605 kHz)	1 /33 nF	A B C	Min.	L K H G	L K H G	1 /100 kΩ Max.
MW (525-1605 kHz)	512 kHz 1635 kHz 600 kHz 1400 kHz	C	Max. Min. Tune in		P CT6 S16a,c CT4	1 /100 kΩ Max.
LW (150-260 kHz)	147 kHz 200 kHz		Max. Tune in		CT5 S16b,d	
SW (5.95-18.3 MHz)	5.8 MHz 18.7 MHz 6.5 MHz 17.5 MHz	D	Max. Min. Tune in		N CT7 M CT3	
FM (87.5-104 MHz)	2 10.7 MHz /4.7 nF Δf=200 kHz (50 Hz)	E B F D	Max.	F E D C B A	E D C B A F	2 3 /100 kΩ 3 4 /100 kΩ
FM (87.5-104 MHz)	86.5 MHz 105 MHz 88 MHz 104 MHz	D	Max. Min. Tune in		S4 CT2 S2 CT1	3 /100 kΩ Max.

Repeat - Herhalen - Répéter - Wiederholen - Repitire



-TS- 	-R- 
TS1,2,4,5,7 BF254 5322 130 44117 TS3,6 BF255 4822 130 40889 TS8 BC408B 4822 130 40872 TS9,10 BC418A 4822 130 40966 TS11,12 AC187/188 pair 4822 130 40347 TS13 BC408A 5322 130 44143	R42 4.7 Ω 1/4 W $\pm 5\%$ 4822 110 53045 R61 1 Ω 1/4 W $\pm 5\%$ 4822 110 53027 R46 100 k Ω lin. 4822 105 10101 R48 50 k Ω log. 4822 105 10099 R59 NTC 4822 116 30007
-S- 	-C- 
S5 4822 156 30439 S6,7,8 4822 153 50187 S9 4822 153 10237 S10 4822 156 30242 S11 4822 153 10268 S12,13 4822 153 10269 S14 4822 153 10232 S15 4822 156 60079 S18 4822 157 30199 S19 4822 157 50756 S16 4822 158 60354 Ferroxcube head 4822 526 10016 Loudspeaker 4822 240 20132	Varco 4822 125 20186 C57 4822 125 60074 CT5 4822 125 50045 CT4,6 4822 125 50062 C1,6 4822 120 33064 C3 4822 122 30013 C4,12,16,19,24,27,30,34,35,37, 41,49,51,59,69,75,77 4822 122 30103 C5,7,26,50,61,62,73,76 4822 122 30025 C9,38 4822 121 50056 C13 4822 120 30062 C18,74 4822 121 50262 C39,55 4822 121 50547 C48 4822 121 50463 C60 4822 121 50472 C52 4822 121 50414 C53 4822 121 50551 C58 /00/22 4822 121 50437 C58 /15 4822 121 50431 C23,33,43,70 4822 125 20355 C64 4822 124 20569 C65,67 4822 124 20373 C71 4822 124 20573 C68,72 4822 124 20409
-D- 	
D1,4,7 BA216 5322 130 30702 D3 AA119 5322 130 40229 D2 FV 1043 4822 130 30845 D5,6 pair 2xAA119 4822 130 30312	



M	D1	TS3	H	K	B	3	D	C	2	ATSS241	4	TS6	16	1E	D2	L	16b	D4	F	D3	MGTS7	D5	6	TS12	13	N	D7	P	TS8	-11	20										M							
C	18	9	12	14	16	5	11	15	8	19	10	6	13	CT1	CT2	7	17	2-4	CT3	CT7	46	1	50	73	40	56	23	70	55	49	41	52	51	47	54	53	CT4	CT6	CT5	58	77	48	42	59	60	61	76	C
C	25	22	75	21	33	28	74	31	29	24	30	32	34	37	38	20	35	39	36	44	45	43	26	71	27	67	64	65	63	62	66	68	72	69	C									C				
R	74	6	8	4	7	2	3	9	5	73	18	22	1	70	10	13	39	38	37	41	42	14	40	34	68	43	64	-67	50	-52	63	54	46	72	48	47	R								R			
R	12	11	17	15	71	19	21	20	26	25	44	28	29	45	23	32	24	27	30	36	16	35	31	33	53	69	57	61	49	55	58	-60	62	56														

