

**This Manual is provided by**  
**CBTricks.com**

Someone who wanted to help you repair your equipment  
scanned this manual.

If you would like to help us put more manuals online support us.

Supporters of CBTricks.com paid for the hosting so you would have this file.

CBTricks.com is a non-commercial personal website was created to help promote the exchange of service, modification, technically oriented information, and historical information aimed at the Citizens Band, GMRS (CB "A" Band), MURS, Amateur Radios and RF Amps.

CBTricks.com is not sponsored by or connected to any Retailer, Radio, Antenna Manufacturer or Amp Manufacturer, or affiliated with any site links shown in the links database. The use of product or company names on my web site is not endorsement of that product or company.

If your company would like to provide technical information to be featured on this site I will put up on the site as long as I can do it in a non-commercial way.

The site is supported with donation from users, friends and selling of the Galaxy Service Manual CD to cover some of the costs of having this website on the Internet instead of relying on banner ads, pop-up ads, commercial links, etc. to pay my costs. Thus I do not accept advertising banners or pop-up/pop-under advertising or other marketing/sales links or gimmicks on my website.

ALL the money from donations is used for CBTricks.com I didn't do all the work to make money (I have a day job). I all didn't do all this work for someone else to make money also, for example the ebay CD sellers.

All Trademarks, Logos, and Brand Names are the property of their respective owners.  
This information is not provided by, or affiliated in any way with any radio or antenna Manufacturers.  
Thank you for any support you can give.

**Parts List**

## Main P.C. Board

Reference Designator	Description	Part No.
	main p.c. board, complete .....	AP-TBM023ET
	main p.c. board, plated and drilled .....	PT-BM023COX
C1	2pF, 50V, ceramic disc .....	CC-CB020COM
C2	22pF, 50V, ceramic disc .....	CC-CB221KOM
C3	6pF, 50V, ceramic disc .....	CC-CB060DOM
C4	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C5	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C6	1pF, 50V, ceramic disc .....	CC-CB010COM
C7	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C8	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C9	560pF, 50V, mylar .....	CQ-MB561KCH
C10	68pF, 50V, ceramic disc .....	CC-CB680KOM
C11	33uF, 16V, electrolytic .....	CE-ED330ALN
C12	220pF, 50V, ceramic disc .....	CC-CB221KOM
C13	270pF, 50V, ceramic disc .....	CC-CB271KOM
C14	(not used)	
C15	1000pF, 50V, mylar .....	CQ-MB102KCH
C16	82pF, 50V, ceramic disc .....	CC-CB820KOM
C17	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C18	68pF, 50V, ceramic disc .....	CC-CB680KOM
C19	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C20	(not used)	
C21	.022uF, 50V, mylar .....	CQ-MB223KCH
C22	22pF, 50V, ceramic disc .....	CC-CB220KOM
C23	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C24	82pF, 50V, ceramic disc .....	CC-CB820KPM
C25	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C26	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C27	330pF, 50V, ceramic disc .....	CC-CB331KOM
C28	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C29	120pF, 50V, ceramic disc .....	CC-CB121KOM
C30	220pF, 50V, ceramic disc .....	CC-CB221KOM
C31	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C32	100pF, 500V, mica .....	CM-SD101KCS
C33	270pF, 500V, mica .....	CM-SD271KCS
C34	2pF, 500V, ceramic disc .....	CC-EE020COM
C35	.0047uF, 50V, ceramic disc .....	CK-CB472PEM
C36	1uF, 50V, electrolytic .....	CE-EG010ALN
C37	27pF, 50V, ceramic disc .....	CC-CB270KOM
C38	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C39	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C40	(not used)	
C41	12pF, 50V, ceramic disc .....	CC-CB120KOM
C42	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C43	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C44	2pF, 50V, ceramic disc .....	CC-CB020COM
C45	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C46	47pF, 50V, ceramic disc .....	CC-CB470KOM
C47	.047uF, 50V, mylar .....	CQ-MB473KCH
C48	22pF, 500V, ceramic disc .....	CG-2H2R2KNN
C49	.047uF, 50V, mylar .....	CQ-MB473KCH
C50	.047uF, 50V, mylar .....	CQ-MB473KCH
C51	.047uF, 50V, mylar .....	CQ-MB473KCH
C52	.047uF, 50V, mylar .....	CQ-MB473KCH
C53	.015uF, 50V, mylar .....	CQ-MB153KCH
C54	.022uF, 50V, mylar .....	CK-CB223ZEM
C55	1uF, 50V, electrolytic .....	CE-EG010LAN
C56	4700pF, 50V, mylar .....	CQ-MB472KCH
C57	33uF, 25V, electrolytic .....	CE-EE3R3ALN
C58	10uF, 16V, electrolytic .....	CE-ED100ALN

Reference Designator	Description	Part No.
C59	.047uF, 50V, mylar .....	CQ-MB473KCH
C60	.047uF, 50V, mylar .....	CQ-MB473KCH
C61	27pF, 50V, ceramic disc .....	CC-CB270KPM
C62	560pF, 50V, mylar .....	CQ-MB561KCH
C63	68pF, 50V, ceramic disc .....	CC-CB680KOM
C64	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C65	2200pF, 50V, ceramic disc .....	CK-CB222KBM
C66	.022uF, 50V, mylar .....	CQ-MB223KCH
C67	.01uF, 50V, mylar .....	CQ-MB103KCH
C68	220pF, 50V, ceramic disc .....	CK-CB222PEM
C69	3.9uF, 25V, tantalum .....	CS-SE3R9MDN
C70	.01uF, 50V, ceramic disc .....	CK-CBL03PEM
C72	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C73	33uF, 6.3V, electrolytic .....	CE-EB330ALN
C74	100pF, 50V, ceramic disc .....	CC-CB101KOM
C75	.068uF, 50V, mylar .....	CQ-MB683KCH
C76	68pF, 50V, ceramic disc .....	CC-CB680KOM
C77	68pF, 50V, ceramic disc .....	CC-CB680KOM
C78	100pF, 50V, ceramic disc .....	CC-CB101KOM
C79	.068uF, 50V, mylar .....	CQ-MB683KCH
C80	47uF, 16V, electrolytic .....	CE-ED470ALN
C81	220uF, 10V, electrolytic .....	CE-EC221AMN
C82	33uF, 6.3V, electrolytic .....	CE-EB330ALN
C83	10uF, 16V, electrolytic .....	CE-ED100ALN
C84	1uF, 50V, electrolytic .....	CE-EG010ALN
C85	47uF, 16V, electrolytic .....	CE-ED470AMN
C86	1000uF, 16V, electrolytic .....	CE-ED102ZUN
C87	33uF, 6.3V, electrolytic .....	CE-ED330ALN
C88	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C89	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C90	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C91	.047uF, 50V, ceramic disc .....	CK-CB473ZFM
C92	.047uF, 50V, ceramic disc .....	CK-CB473ZFM
C93	.047uF, 50V, ceramic disc .....	CK-CB473ZFM
C94	.047uF, 50V, ceramic disc .....	CK-CB473ZFM
C95	.047uF, 50V, ceramic disc .....	CK-DB473ZFM
C96	.01uF, 50V, ceramic disc .....	CK-CB103PEM
C97	22pF, 50V, ceramic disc .....	CC-CB220KOM
C98	(not used)	
C99	47pF, 50V, ceramic disc .....	CC-CB470KOM
CF	ceramic filter .....	FB-R455A08M
CH	audio choke coil .....	LJ-119H001Y
D1	SR1K-4 .....	QD-SSR1KX4P
D2	RD9.1E, silicon, zener .....	QD-ZRD9EXAA
D3	VO6C, silicon .....	QD-SVO6CXXB
D4	1S1555, silicon .....	QD-SS1555XT
D5	1S1555, silicon .....	QD-SS1555XT
D6	1S1555, silicon .....	QD-SS1555XT
D7	1N60, germanium .....	QD-G1N60XXT
D8	1N60, germanium .....	QD-G1N60XXT
D9	1N60, germanium .....	QD-G1N60XXT
D10	1N60, germanium .....	QD-G1N60XXT
D11	1N60, germanium .....	QD-G1N60XXT
D12 through D14	(not used)	
D15	1S1555, silicon .....	QD-SS1555Xt
IC1	(TOSHIBA) TA7205P .....	QQM07205AT

Reference Designator	Description	Part No.
L1	rf coil .....	TR-10DD001T
L2	rf coil .....	TR-10ND001T
L3	rf coil .....	TR-10ND002T
L4	rf coil .....	TR-10CD002T
L5	rf coil .....	TR-10CD003T
L6	rf coil .....	TR-10CP001S
L7	rf coil .....	TR-A5CZ001M
L8	rf coil .....	TR-A5CZ002M
L9	rf coil .....	TR-A5CZ003M
L10	rf coil .....	TR-10MP003T
L11	rf coil .....	TR-10CA003T
L12	rf coil .....	TR-07MB001N
L13	rf coil .....	TR-07MB001N
L14	i-f transformer.....	TR-07LA004N
L15	i-f transformer.....	TR-07LA005N
L16	i-f transformer.....	TR-07LA023N
Q1	(NEC) 2SC839H(F) .....	QT-C0839XDA
Q2	(MITSUBISHI) 2SC710(C) .....	QT-C0710XAE
Q3	(NEC) 2SC839(H) .....	QT-C0839XDA
Q4	(NEC) 2SC839(H) .....	QT-C0839XDA
Q5	(MITSUBISHI) 2SC710(C) .....	QT-C0710XAE
Q6	(MITSUBISHI) 2SC710(C) .....	QT-C0710XAE
Q7	(TOSHIBA) 2SC735(O).....	QT-C0735XBT
Q8	(SONY) 2SC1760-2.....	QT-C1760XCS
Q9	(NEC) 2SC1306 . . . . .	QT-C1306XZA
Q10	(MATSUSHITA) 2SC1318(Q).....	QT-C1318XDN
Q11	(MATSUSHITA) (2SA719(Q) .....	QT-A0719XCN
Q12	(HITACHI) 2SC460(A).....	QT-CO460CBB
Q13	(MITSUBISHI) 2SC710(C) .....	QT-C0710XAE
Q14	(MITSUBISHI) 2SC710(C) .....	QT-C0710XAE
Q15	(MITSUBISHI) 2SC710(C) .....	QT-C0710XAE
Q16	(NEC) 2SC839(H) .....	QT-C0839XDA
Q17	(NEC) 2SC945A(R) .....	QT-C0945AGA
Q18	(NEC) 2SC945A(R) .....	QTC0945ACA
Q19	(NEC) 2SC945A(R) .....	QT-C0945ACA
R1	3.9k, 5%, 1/4w, carbon film.....	RD-14SJ392D
R2	12k, 5%, 1/4w, carbon film .....	RD-14SJ123D
R3	330, 5%, 1/4w, carbon film .....	RD-14SJ331D
R4	47, 5%, 1/4w, carbon film .....	RD-14SJ470D
R5	1k, 5%, 1/4w, carbon film .....	RD-14SJ102D
R6	680, 5%, 1/4w, carbon film .....	RD-14SJ681D
R7	47, 5%, 1/4w, carbon film .....	RD-14SJ470D
R8	6.8k, 5%, 1/4w, carbon film.....	RD-14SJ682D
R9	(not used)	
R10	3.3k, 5%, 1/4w, carbon film.....	RD-14SJ332D
R11	47, 5%, 1/4w, carbon film .....	RD-14SJ470D
R12	470, 5%, 1/4w, carbon film .....	RD-14SJ471D
R13	6.8k, 5%, 1/4w, carbon film.....	RD-14SJ682D
R14	3.3k, 5%, 1/4w, carbon film.....	RD-14SJ332D
R15	470, 5%, 1/4w, carbon film .....	RD-14SJ471D
R16	100, 5%, 1/4w, carbon film .....	RD-14SJ101D
R17	3.9k, 5%, 1/4w, carbon film.....	RD-14SJ392D
R18	270, 5%, 1/4w, carbon film .....	RD-14SJ271D
R19	2.7k, 5%, 1/4w, carbon film.....	RD-14SJ272D
R20	5.6k, 5%, 1/4w, carbon film .....	RD-14SJ562D
R21	220, 5%, 1/4w, carbon film .....	RD-14SJ221D
R22	68, 5%, 1/4w, carbon film .....	RD-14SJ680D
R23	100, 5%, 1/4w, carbon film .....	RD-14SJ101D
R24	220, 5%, 1/4w, carbon film .....	RD-14SJ221D
R25	47, 5%, 1/4w, carbon film .....	RD-14SJ470D
R26	10, 5%, 1/2, metal oxide .....	RX-HANJ100N
R27	47k, 5%, 1/4w, carbon film .....	RD-14SJ473D

Reference Designator	Description	Part No.
R28	1k, 5%, ¼w, carbon film	RD-14SJ102D
R29	22, 5%, ½w, metal oxide	RG-HANJ220N
R30	1k, 5%, ¼w, carbon film	RD-14SJ102D
R31	390, 5%, ¼w, carbon film	RD-14SJ391D
R32	3.3k, 5%, ¼w, carbon film	RD-14SJ332D
R33	330, 5%, ¼w, carbon film	RD-14SJ331D
R34	1k, 5%, ¼w, carbon film	RD-14SJ102D
R35	33k, 5%, ¼w, carbon film	RD-14SJ333D
R36	680, 5%, ¼w, carbon film	RD-14SJ681D
R37	220, 5%, ¼w, carbon film	RD-14SJ221D
R38	1.8k, 5%, ¼w, carbon film	RD-14SJ182D
R39	560, 5%, ¼w, carbon film	RD-14SJ561D
R40	470, 5%, ¼w, carbon film	RD-14SJ471D
R41	1k, 5%, ¼w, carbon film	RD-14SJ102D
R42	4.7k, 5%, ¼w, carbon film	RD-14SJ472D
R43	470, 5%, ¼w, carbon film	RD-14SJ471D
R44	47k, 5%, ¼w, carbon film	RD-14SJ473D
R45	470, 5%, ¼w, carbon film	RD-14SJ471D
R46	3.3k, 5%, ¼w, carbon film	RD-14SJ332D
R47	12k, 5%, ¼w, carbon film	RD-14SJ123D
R48	22k, 5%, ¼w, carbon film	RD-14SJ223D
R49	220, 5%, ¼w, carbon film	RD-14SJ221D
R50	47, 5%, ¼w, carbon film	RD-14SJ470D
R51	22k, 5%, ¼w, carbon film	RD-14SJ223D
R52	47k, 5%, ¼w, carbon film	RD-14SJ473D
R53	68k, 5%, ¼w, carbon film	RD-14SJ683D
R54	47k, 5%, ¼w, carbon film	RD-14SJ473D
R55	33k, 5%, ¼w, carbon film	RD-14SJ333D
R56	820, 5%, ¼w, carbon film	RD-14SJ821D
R57	100, 5%, ¼w, carbon film	RD-14SJ101D
R58	5.6k, 5%, ¼w, carbon film	RD-14SJ562D
R59	3.3k, 5%, ¼w, carbon film	RD-14SJ332D
R60	2.2k, 5%, ¼w, carbon film	RD-14SJ222D
R61	820, 5%, ¼w, carbon film	RD-14SJ821D
R62	47, 5%, ¼w, carbon film	RD-14SJ470D
R63	220k, 5%, ¼w, carbon film	RD-14SJ224D
R64	27k, 5%, ¼w, carbon film	RD-14SJ273D
R65	22k, 5%, ¼w, carbon film	RD-14SJ223D
R66	150, 5%, ¼w, carbon film	RD-14SJ151D
R67	10k, 5%, ¼w, carbon film	RD-14SJ103D
R68	82, 5%, ¼w, carbon film	RD-14SJ820D
R69	270, 5%, ¼w, carbon film	RD-14SJ271D
R70	680, 5%, ¼w, carbon film	RD-14SJ681D
R71	22k, 5%, ¼w, carbon film	RD-14SJ223D
R72	1.8k, 5%, ¼w, carbon film	RD-14SJ182D
R73	15k, 5%, ¼w, carbon film	RD-14SJ153N
R74	270, 5%, ½w, metal oxide	RG-HANJ271N
R75	270, 5%, ½w, metal oxide	RG-JANJ271T
R76	15, 5%, 1w, metal oxide	RX-2ANJ150N
R77	3.3k, 5%, ¼w, carbon film	RD-14SJ332D
R78	5.6, 5%, ¼w, carbon film	RD-14SJ562D
R79	560, 5%, ¼w, carbon film	RD-14SJ561D
R80	(not used)	
R81	1.5k, 5%, ¼w, carbon film	RD-14SJ152D
R82 through R89	(not used)	
R90	270k, 5%, ¼w, solid carbon	RC-14GK274N
R91 through R115	(not used)	
R116	270, 5%, ½w, metal oxide	RG-JANJ271N
RFC1	RF Choke Coil	LD-ADB4024B
RFC2	RF Choke Coil	LD-ADB4024B
RFC3	RF Choke Coil	LF-680KD01N
RFC4	RF Choke Coil	LD-150KD01N
RFC5	RF Choke Coil	LF-680KD01N
RFC6	RF Choke Coil	LQ-AHB3638L

<b>Reference Designator</b>	<b>Description</b>	<b>Part No.</b>
RV1	10k, potentiometer .....	RP-GNB10301
RV2	2k, potentiometer .....	RP-GNB20201
RV3	20k, potentiometer .....	RP-GNB20301
RV4	20k, potentiometer .....	RP-GNB20301
T1	transformer, audio .....	TB-G25B001W
X1 through X10	(see crystal p.c. board)	
X11	11.275 MHz crystal .....	XA-Z1A1002T
X12	11.730 MHz crystal .....	XA-Z1A2001T

### Crystal P.C. Board

Reference Designator	Description	Part No.
	crystal p.c. board, complete.....	AP-TZX006BA
	crystal p.c. board, plated and drilled .....	PT-ZX006AOX
R1	5.6k, 5%, 1/4w, carbon film.....	RD-14SJ562D
S1	switch, rotary .....	SR-042405H
X1	23.290 MHz, crystal.....	XA-S3A1001T
X2	23.340 MHz, crystal.....	XA-S3A1002T
X3	23.390 MHz, crystal.....	XA-S3A1003T
X4	23.340 MHz, crystal.....	XA-S3A1004T
X5	23.490 MHz, crystal.....	XA-S3A1005T
X6	23.540 MHz, crystal.....	XA-S3A1006T
X7	14.950 MHz, crystal.....	XA-S1A1009T
X8	14.960 MHz, crystal.....	XA-S1A1010T
X9	14.970 MHz, crystal.....	XA-S1A1011T
X10	14.990 MHz, crystal.....	XA-S1A1012T

### Power Supply P.C. Board

Reference Designator	Description	Part No.
	power supply p.c. board, complete.....	AP-TPW005AA
	power supply p.c. board, plated and drilled .....	PT-TW005COX
C1	2200uF, 25V, electrolytic .....	CE-T1E22201
C2	100uF, 25V, electrolytic .....	CE-AE101ALN
C3	.022uF, 50V, ceramic disc .....	CK-RB223PZM
C4	.01uF, 50V, ceramic disc .....	CK-RB103PZM
C5	.047uF, 50V, ceramic disc .....	CK-RB473PMM
C6	.022uF, 50V, ceramic disc .....	CK-RB223PMM
D1	VO6C, silicon .....	QD-SVO6CXXB
D2	VO6C, silicon .....	QD-SVO6VXXB
D3	VO6C, silicon .....	QD-SVO6CXXB
D4	VO6C, silicon .....	QD-SVO6CXXB
F1	fuse 250V, 3/4A .....	ZF-BQ75101U
Q1	(NEC) 2SC900F .....	QT-C0900XBA
Q2	(NEC) 2SC900F .....	QT-C0900XBA
R1	220, 5%, 1/2w, solid carbon.....	RC-12GK221N
R2	47, 5%, 1/2w, solid carbon .....	RC-12GK470N
R3	100, 5%, 1/2w, solid carbon.....	RC-12GK101N
R4	820, 5%, 1/2w, solid carbon .....	RC-12GK821N
R5	1.2k, 5%, 1/2w, solid carbon.....	RC-12GK122N
R6	820, 5%, 1/2w, solid carbon .....	RC-12GK820N
RV1	500, potentiometer.....	RP-ANB50101
ZD1	BZ-162, silicon, zener .....	QD-ZBZ162XJ
ZD2	RD5.6E(C), silicon, zener .....	QD-ZRD56EAA



## Chassis Mounted Components

Reference Designator	Description	Part No.
C1	220pF, 500V, mica .....	CM-SD221KCS
C2	.01uF, 50V, ceramic disc .....	CK-DB103PEM
C3	.01uF, 50V, ceramic disc .....	CK-DB103PEM
C4	.01uF, 50V, ceramic disc .....	CK-DB103PEM
CR1	CR module .....	CR-E471A01M
F1	fuse, 250V, 2.5A .....	ZF-AQ25201U
J1	jack, antenna .....	YJ-C02S008Z
J2	jack, 5 pin, DIN, microphone .....	YJ-D05S001Z
J3	jack, phone .....	YJ-S03S010Z
J4	jack, phone .....	YJ-S04S002Z
J5	jack, DC power .....	YJ-B02S001U
J6	jack, AC power .....	YJ-A02S001U
M	meter .....	ZM-J2050N02
PL1	lamp, pilot .....	ZP-A064102U
PL2	lamp, pilot .....	ZP-A064102U
PL3	lamp, pilot .....	ZP-A064102U
Q3	(SANYO) 2SD313 .....	QT-D0313XAC
S1	on/off power switch (part of volume control) .....	RV-AD503A04
SP	speaker, 8 ohm .....	ZQ-A0770802
VR1	50k, potentiometer (volume control) .....	RV-AD503A04
VR2	10k, potentiometer (squelch control) .....	RV-NA103B03
	transformer, power .....	TP-H68G001K

## Mechanical Parts

Part No.	Description	Qty.
AM-3077##01	cabinet assembly, upper .....	1
AM-3077##02	cabinet assembly, lower .....	1
MB-871SZ009	chassis, main frame .....	1
MZ-111SZ002	bracket, speaker holding .....	1
AV-KNOB#044	knob, channel select .....	1
AV-KNOB#045	knob, volume and squelch .....	2
AV-KNOB#046	plate, channel .....	1
MB-763SZ003	panel, rear .....	1
MU-443SZ002	bracket, phone jack mounting .....	1
MU-443SZ001	bracket, mic jack mounting .....	1
MC-576XZ001	bracket, rotary switch mounting .....	1
AC-AC008ULA	cord, AC power .....	1
AC-DC034ULA	cord, DC power .....	1

**Accessory Parts**

<b>Part No.</b>	<b>Description</b>	<b>Qty.</b>
ZG-AAZ70101	microphone .....	1



**Schematic Diagram**