

EDACS AEGIS™ M-PA PERSONALS

PRODUCT CODE PA



SCAN MODEL



SELECT MODEL



SYSTEM MODEL

PRODUCT PROGRAMMING

ORDERING NUMBER	DESCRIPTION
TQ3370 TQ3340 or TQ3384 or TQ3385 * TQ3311	PC Programming Adapter Kit. Includes Serial Interface Unit, PC to Serial Interface Unit Cable, and Auxiliary Power Supply. (Replaces TQ3310 and provides Flash Programming Capability.) Radio Programming Software (DOS Version) Programmer CV Windows Programming Software EDACS Programmer Windows Programming Software EDACS Note: See Page 28.1-6 for description of above software packages PC Programming Cable. Interface between radio and interface box.

EDACS AEGIS™ M-PA PERSONALS
PRODUCT CODE PA

PRODUCT NOMENCLATURE

UHF BAND EDACS

RADIO CONFIGURATION		FREQUENCY RANGE (MHz)	RF POWER	PACKAGE NUMBER	COMBINATION NUMBER
No Encryption	SELECT Models	403-440 440-470	5W 5W	PAPAT4 PAUAT4	PAPESX *
	SCAN Models	403-440 440-470	5W 5W	PAPAT5 PAUAT5	PAPEDX *
	SYSTEM Models	403-440 440-470	5W 5W	PAPAT6 PAUAT6	PAPEPX *
DES Encryption	SELECT Models	403-440 440-470	5W 5W	PAPATG PAUATG	* *
	SCAN Models	403-440 440-470	5W 5W	PAPATH PAUATH	* *
	SYSTEM Models	403-440 440-470	5W 5W	PAPATJ PAUATJ	* *
VGE Encryption	SELECT Models	403-440 440-470	5W 5W	PAPATK PAUATK	* *
	SCAN Models	403-440 440-470	5W 5W	PAPATL PAUATL	* *
	SYSTEM Models	403-440 440-470	5W 5W	PAPATM PAUATM	* *

*Combination Number not used for these model numbers.

EDACS AEGIS™ M-PA PERSONALS
 PRODUCT CODE PA

PRODUCT NOMENCLATURE

800 MHz BAND EDACS

RADIO CONFIGURATION		FREQUENCY RANGE (MHz)	RF POWER	PACKAGE NUMBER	COMBINATION NUMBER
No Encryption	SELECT Model	806-870	3W	PAZAT4	PAZESX
	SCAN Model	806-870	3W	PAZAT5	PAZEDX
	SYSTEM Model	806-870	3W	PAZAT6	PAZEPX
DES Encryption	SELECT Model	806-870	3W	PAZATG	*
	SCAN Model	806-870	3W	PAZATH	*
	SYSTEM Model	806-870	3W	PAZATJ	*
VGE Encryption	SELECT Model	806-870	3W	PAZATK	*
	SCAN Model	806-870	3W	PAZATL	*
	SYSTEM Model	806-870	3W	PAZATM	*

*Combination Number not used for these model numbers.

EDACS AEGIS™ M-PA PERSONALS
PRODUCT CODE PA

ANTENNA OPTIONS

Option **PANC1B**
136-151 MHz



Option **PANC1F**
440-470 MHz



Option **PANC1H**
806-870 MHz



Option **PANC1N**
440-512 MHz



Option **PANC1K**
806-870 MHz



The Antennas for the M-PA Personals are attractively overmolded with polyurethane for withstanding extreme environmental conditions. The KRE 101 1223 is a slim-line design while the KRE 101 1219 series antennas are the larger flexible design antennas. The KRE 101 1216 is a longer, elevated feed design for extra gain.

EDACS AEGIS™ M-PA PERSONALS
PRODUCT CODE PA

ANTENNA OPTIONS

OPTION NUMBER	PART NUMBER	COLOR BAND	LENGTH	USABLE FREQUENCY
PANC1B	KRE 101 1219/1	Brown	6.15"	136-151 MHz
PANC1C	KRE 101 1219/2	Red	5.5"	146-162 MHz
PANC1D	KRE 101 1219/3	Orange	5.3"	157-174 MHz
PANC1F	KRE 101 1219/12	Red	2.5"	440-470 MHz Stub
PANC1G	KRE 101 1219/13	Orange	2.3"	470-494 MHz Stub
PANC1L	KRE 101 1223/10	Brown	6.625"	406-440 MHz Whip
PANC1M	KRE 101 1223/11	Red	6.25"	440-470 MHz Whip
PANC1N	KRE 101 1223/12	Orange	6.0"	470-512 MHz Whip
PANC1U	KRE 101 1219/10	Black	2.8"	403-440 MHz Stub
PANC1V	KRE 101 1219/14	Yellow	2.2"	492-514 MHz Stub
PANC1H	KRE 101 1216/01	Yellow	9.12"	806-870 MHz Elevated Feed
PANC1K	KRE 101 1223/01	Yellow	4.1"	806-894 MHz Whip
PANC1Z	KRE 101 1223/03	Green	3.5"	896-941 MHz Whip

AUDIO ACCESSORY OPTIONS

Option **PAAE3Z**
RLD 541 07/11
Earpiece Assembly
(includes cable and connector for
the trumpet speaker microphone)

- | | |
|---------------------|------------------------------------|
| RLD 541 07/2 | Earphone, Adapter, Tip and Earloop |
| RLD 541 07/4 | Cable Assembly only |
| C100569-2 | Eartip (Rubber) |
| C100733 | Noise Attenuating Plug |
| C100746 | Noise Attenuating Kit |



REFER TO SECTION 25-40 FOR EARLIER VERSION RLD 541 07/1 EARPIECE ASSY.

AUDIO ACCESSORY OPTIONS



KRY 101 1617/11 GE Label
KRY 101 1617/13 Ericsson Label
 Evolution Speaker Microphone (Includes coiled cord, volume control, earpiece jack and spring clip)

C100748	Earphone Jack, Cover & Nut
C100749	Back Cover/Speaker Pad
C100750	Speaker Assy
C100751	Mic/Mic Holder
C100754	V/C Knob with "O" Ring
C100752	Housing, Emer. Button, PTT Button, Retainer, (Jack Cover, Nut), Felt, V/C Knob, Mic/Mic Holder (Assembled)
C100651	Thumbscrew w/Thumbscrew "O" Ring Assy-Low Profile
C100682	Thumbscrew w/Thumbscrew "O" Ring Assy-Tall Profile
C100756	PCB W/ Hardware
V3-10024	Cable Assy, Retainer W/Thumbscrew, MPA Non-Antenna Connector Assy
C401401-10	Earphone Jack Cover

REFER TO SECTION 25-37 FOR EARLIER VERSION OF KRY 101 1606 SPEAKER MIC

EDACS AEGIS™ M-PA PERSONALS
 PRODUCT CODE PA

AUDIO ACCESSORY OPTIONS



KRY 101 1617/12 GE Label

KRY 101 1617/14 Ericsson Label

Evolution Speaker Microphone with antenna jack connector
 (Includes straight cord, volume control, earpiece jack and spring clip. Antenna must be ordered separately by frequency)

C100748	Earphone Jack, Cover & Nut
C100847	Back Cover/Speaker Pad
C100750	Speaker Assy
C100751	Mic/Mic Holder
C100754	V/C Knob with "O" Ring
C100755	Housing, Emer. Button, PTT Button, Retainer, (Jack Cover, Nut), Felt, V/C Knob, Mic/Mic Holder (Assembled)
C100651	Thumbscrew w/Thumbscrew "O" Ring Assy-Low Profile
C100682	Thumbscrew w/Thumbscrew "O" Ring Assy-Tall Profile
C100756	PCB W/ Hardware
V3-10025	Cable Assy, Retainer W/Thumbscrew, MPA w/Antenna Connector Assy
C401401-10	Earphone Jack Cover

REFER TO SECTION 25-37 FOR EARLIER VERSION OF KRY 101 1606 SPEAKER MIC

AUDIO ACCESSORY OPTIONS



Option **PAAE1B**
19B801586P3

Speaker/Microphone with GE-STAR Lanyard
(Scan and System models only)

H29/53042015	Coiled Cord with Plug Only
H29/10347041	Coiled Cord Only



Option **PAAB1A**
19B801508P3

Headset/Microphone for High Noise Environment
(includes noise cancelling microphone,
noise attenuating ear cups and an interface
cable with PTT switch)

AUDIO ACCESSORY OPTIONS



Option **PAAC1B**
19B801586P7

GE-STAR Lanyard Only
(required for emergency GE-STAR communications)
(Scan and System models only)

H29/32104208

Lanyard Plug Only



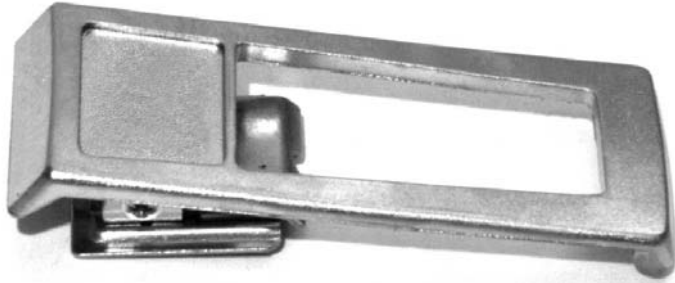
Option **PAAC1A**
K19/2SBA001041

Earpiece Kit
(includes cable and connector/jack for
connection to the radio's UDC connector)

K19/A4WX01506
K19/A4WX01505
ENV-4T

Earphone with Cord & Plug Only
UDC Earphone Jack
Soft Plastic Ear Insert Only

CARRYING ACCESSORY OPTIONS



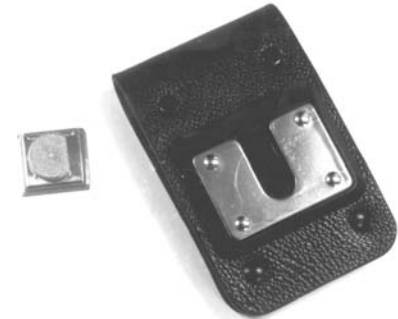
Option **PAHC1C**
 Belt Clip

(mounts on back cover of radio)

- | | |
|--------------------|------------------------|
| 19A144704G1 | Radio Modification Kit |
| 19B233241G1 | Belt Clip |



KRY 101 1232
 Plastic Belt Clip



Option **PAHC1D**

Swivel Mount Plate with Belt Loop
 (mounts on back cover of radio)

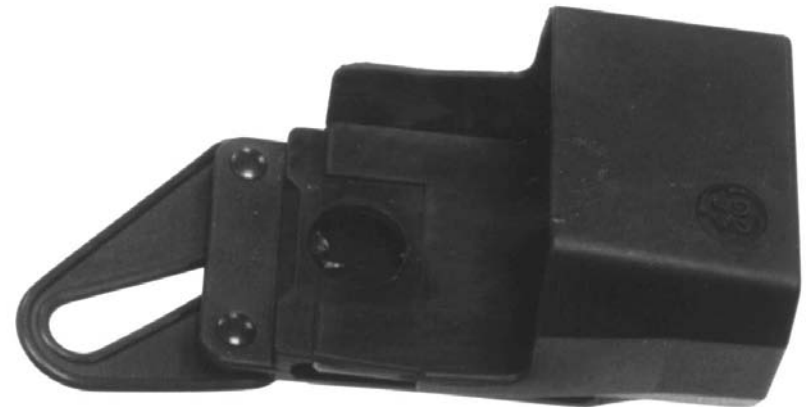
- | | |
|-------------|------------------------|
| 19A144704G1 | Radio Modification Kit |
| 19B226627G2 | Belt Loop |
| 19B233243G1 | Swivel Socket |



Option **PAHC1K**

Leather Shoulder Strap
 (includes plate for mounting on radio)

- | | |
|--------------------|--------|
| 19B216496P3 | Strap |
| 19B233236G1 | Shield |



Option **PAHC5R**

Plastic Holder with Retaining Loop

- | | |
|-------------|----------------|
| 19D902370P4 | Holster |
| 19D902370P2 | Retaining Loop |

CARRYING ACCESSORY OPTIONS



Case/Belt Loop
 Option **PAHC1E** (Shown)
 (for radio with short battery)

19D902455P6	Strap
19D902455P2	Case/Belt Loop
19D902455P5	Leather Flap

Option **PAHC1F**
 (for radio with tall battery)

19D902455P6	Strap
19D902455P4	Case/Belt Loop
19D902455P5	Leather Flap



Case/Swivel Mount/Belt Loop
 Option **PAHC3W** (Shown)
 (for radio with tall battery)

19B226627G2	Belt Loop
19D902455P6	Strap
19D902455P9	Leather Case
19D902455P5	Leather Flap

Option **PAHC3V**
 (for radio with short battery)

19B226627G2	Belt Loop
19D902455P6	Strap
19D902455P7	Leather Case
19D902455P5	Leather Flap

BATTERY OPTIONS



Option **PAPA1H**
BKB 191 205/1
High Capacity Rechargeable Battery
(1200 MAH capacity, short housing)



Option **PAPA1E**
BKB 191 205/3
Extra High Capacity Rechargeable Battery
(1700 MAH capacity, tall housing)



Option **PAPA1G**
BKB 191 205/2
High Capacity Intrinsically Safe Battery
(1200 MAH capacity, short housing)

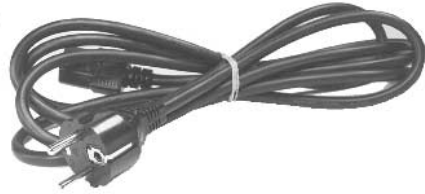


Option **PAPA1F**
BKB 191 205/4
Extra High Capacity Intrinsically Safe Battery
(1700 MAH capacity, tall housing)

EDACS AEGIS™ M-PA PERSONALS

PRODUCT CODE PA

BATTERY CHARGER OPTIONS



Single-Battery Desk Charger Options

CH1SA1	120V	60 Hz	14 HR
CH1RA1	120V	50/60 Hz	1HR
CH1SA2	230V	50/60 Hz	14 HR
CH1RA2	230V	50/60 Hz	1 HR

Multi-Battery Desk/Wall Charger Options

CH6SA1	120V	60 Hz	14 HR
CH6RA1	120V	50/60 Hz	1 HR
CH6SA2	230V	50/60 Hz	14 HR
CH6RA2	230V	50/60 Hz	1 HR



Compact Vehicular Charger
 Option **H2A5C2A**
 19A705656P2
 13.8 VDC 14 HR

(includes mobile mounting bracket and fused power cable)

VEHICULAR BATTERY CHARGER OPTIONS



Option **H2V01**
Vehicular Charger Package
(Order from Order Service Only)

H2A3C3A	Vehicular Charger
19A149328G1	Std. Charger Mtg. Kit
344A4678P1	Bracket
19A115903P1	Connector Plug
19B801398P3	Microphone
19A149590P1	Speaker
19A149590P6	Speaker Cable

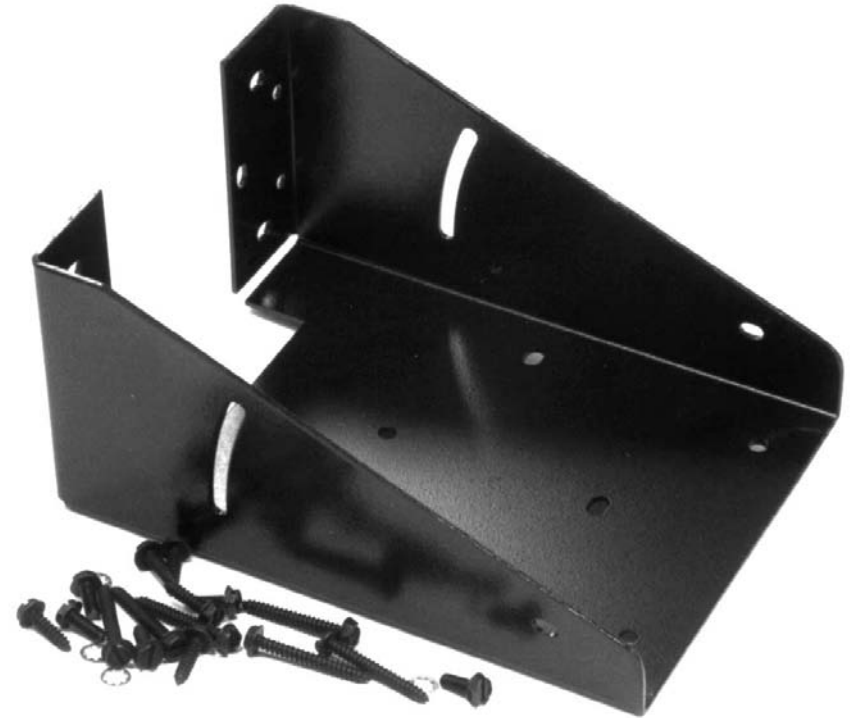


Option **H2V02**
(Order from Order Service Only)
Vehicular Repeater Charger Package
(includes H2A4C3A vehicular charger,
standard mounting bracket and
19B801483G2 Adapter kit)

VEHICULAR BATTERY CHARGER OPTIONS



Option **H2MN1N**
19A149328G2
Horizontal Mounting Bracket Kit
(accepts standard mounting kit for
specialized horizontal mounts)
(for use with option H2V01)



Option **H2MN1P**
19A149328G3
Vertical Mounting Bracket Kit
(accepts standard mounting kit for
specialized vertical mounts)
(for use with option H2V01)

EDACS AEGIS™ M-PA PERSONALS
PRODUCT CODE PA

COMPLETE BOARD ASSEMBLIES

UHF BAND

PART NUMBER	BOARD DESCRIPTION	FREQUENCY RANGE (MHz)	RF POWER
19D903081G1	EDACS Control Board	—	—
344A3659P3	AEGIS DES Board	—	—
344A3659P4	AEGIS Voice Guard/VGE Board	—	—
19D902282G1	RF Board	403-440	5W
19D902282G6	RF Board	440-470	5W
19C337097G4	Rear Cover/RF Assembly	403-440	5W
19C337097G5	Rear Cover/RF Assembly	440-470	5W

800 MHz

PART NUMBER	BOARD DESCRIPTION	FREQUENCY RANGE (MHz)	RF POWER
19D903081G1	EDACS Control Board	—	—
344A3659P3	AEGIS DES Board	—	—
344A3659P4	AEGIS Voice Guard/VGE Board	—	—
188D5111G1	RF Board	806-870	3W
19C337097G12	Rear Cover/RF Board Assembly (Including RF Board)	806-870	3W

EDACS AEGIS™ M-PA PERSONALS
PRODUCT CODE PA

RF POWER MODULES

BAND	PART NUMBER	CIRCUIT SYMBOL	CIRCUIT FUNCTION	SIMILAR TO
UHF	19A705419P1 19A705419P2	U4 U4	403-440 MHz Power Amplifier 440-470 MHz Power Amplifier	MHW-707-1 MHW-707-2
800 MHz	19A705962P1	U1	803-870 MHz Power Amplifier	M67706

FREQUENCY MODULES

BAND	PART NUMBER	CIRCUIT SYMBOL	DESCRIPTION	BOARD WHERE USED
All	19A702511G27	Y1	8.000 MHz Crystal	Control Board
All	19A702511G61	Y2	2.000 MHz Crystal	Control Board
All	19A702511G26	Y3	11.0592 MHz Crystal	Control Board
UHF	19A705376P5	Y1	45.455 MHz Crystal	RF Board
UHF	19B801351P15	U3	Reference Oscillator	RF Board
800	19B852149G1	Y2	VCO	RF Board
800	19A705376P7	Y3	45.4675 MHz Crystal	RF Board
800	19B801351P17	U4	Reference Oscillator	RF Board

EDACS AEGIS™ M-PA PERSONALS
PRODUCT CODE PA

PROGRAMMABLE IC'S/MICROPROCESSORS

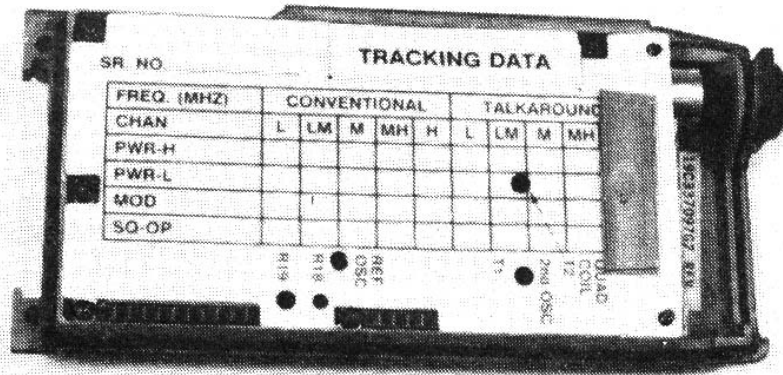
BAND	PART NUMBER	CIRCUIT SYMBOL	DESCRIPTION	BOARD WHERE USED
All	19A149861G3	U7	PROM Kit	Control Board
All	19A705963P2	U15	EEPROM"	Control Board
All	19A149755P5	U17	EEPROM Personality"	Control Board
All	19A705557P5	U18	Masked Microprocessor	Control Board

" Shipped without software.

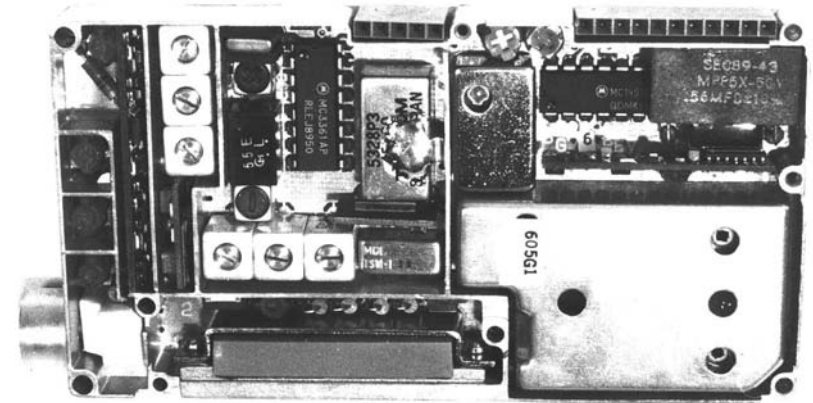
MISCELLANEOUS PARTS

BAND	PART NUMBER	CIRCUIT SYMBOL	DESCRIPTION	BOARD WHERE USED
ALL	19A702169P11 19A701301P3 19A149673P1	F1 MK1 LS1	5 A Fuse Microphone Cartridge Speaker	Front Cover Assembly Front Cover Assembly Front Cover Assembly

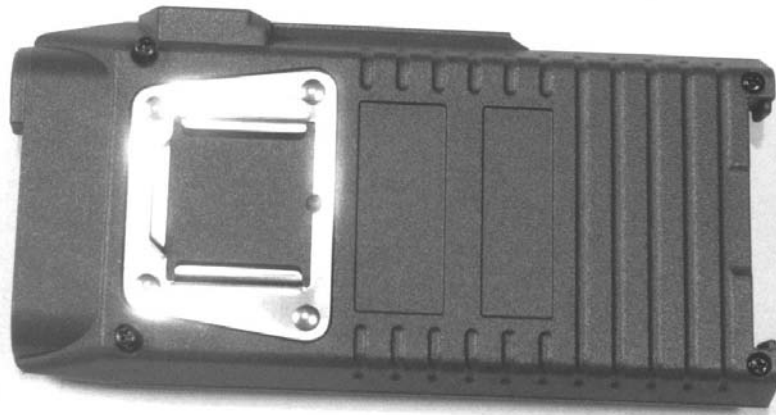
MISCELLANEOUS PARTS



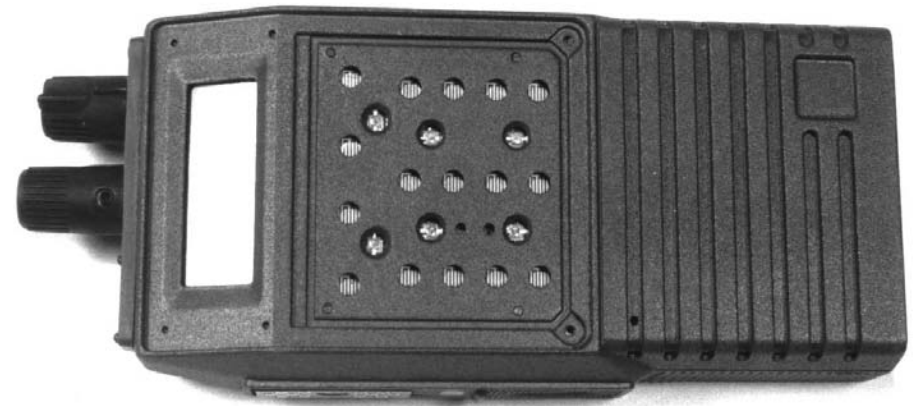
PARF1P
 19C337097G4
 Rear Cover/RF Board Assembly
 (see page 13.2-14 for other
 rear cover assemblies)



19D902282G13
 RF Board Assembly
 (see page 13.2-14 for other
 RF boards)

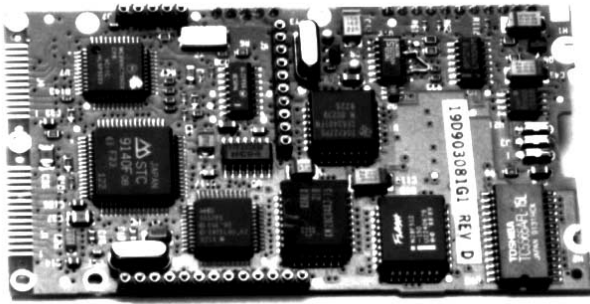


Rear Cover Assemblies:
19B801598G1 HB/UHF
19B801598G2 800 MHz



PAFC1B
 19D903620G1
 Front Cover Assembly
 (without control board)

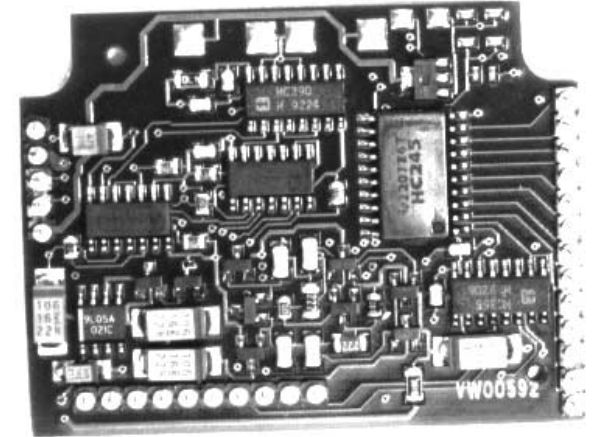
MISCELLANEOUS PARTS



PACT1D
 19D903081G1
 VG/AEGIS/EDACS Control Board
 Assembly



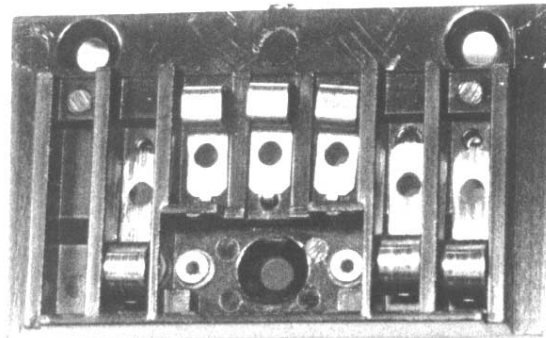
19D438668P29
 SYSTEM Front Control Panel



AEGIS Digital Board Assemblies:
344A3659P4 Voice Guard/VGE
 (Shown)
344A3659P3 DES



19D438668P2
 SCAN Front Control Panel



Baseplate Assemblies:
 19B235165G1 For 19D438676G5
 Front Cover (Shown)
19D902818P1 For 19D903620G1
 Front Cover
(19A702169P11 5A Fuse - order
 separately)



19D438668P3
 SELECT Front Control Panel

EDACS AEGIS™ M-PA PERSONALS
PRODUCT CODE PA

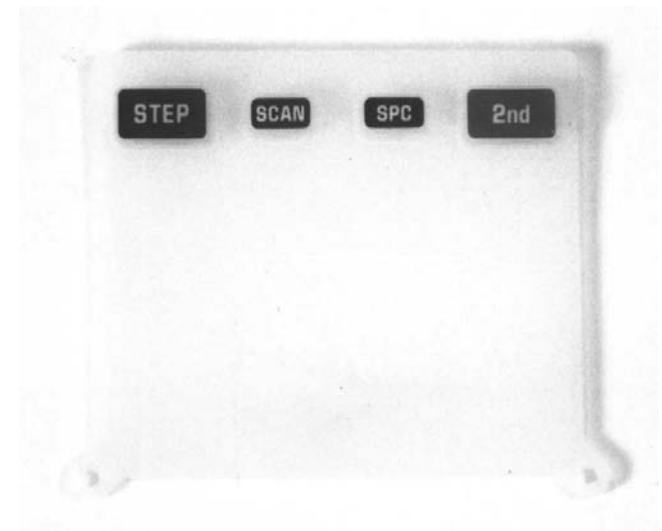
MISCELLANEOUS PARTS



19D902264P10
EDACS SYSTEM Keypad



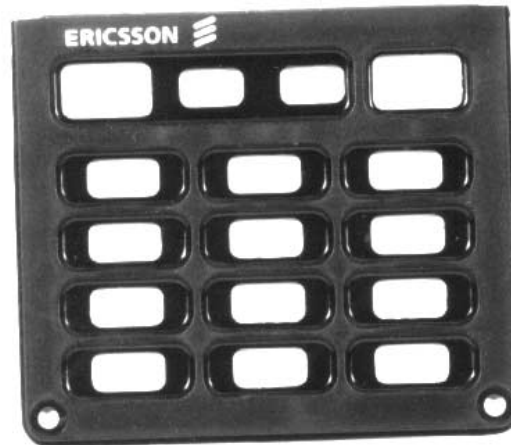
19D902264P3
SELECT Front Keypad



19D902264P5
EDACS SCAN Keypad



19D438668P28
Front Control Panel
(Used on Ericsson Euro Scan Model)

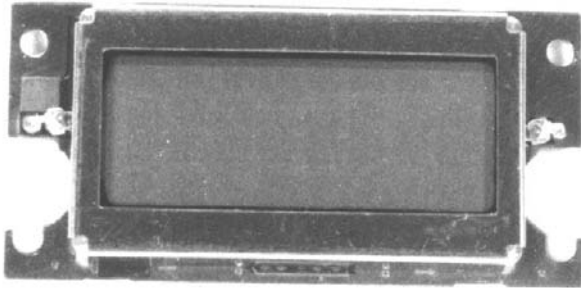


19D438668P10
Front Control Panel
(Used on Ericsson Euro System Model)



19A149673P1
Speaker

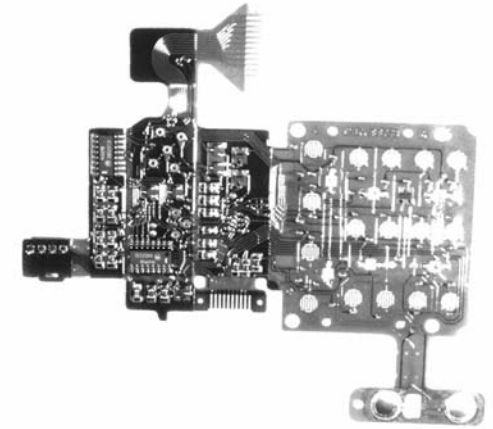
MISCELLANEOUS PARTS



19C337096G1
LCD Board Assembly
(Use with 19D438676G5
Front Cover Assembly.)



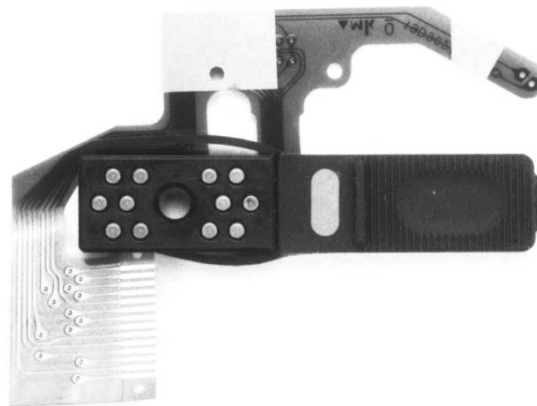
19C337149G1
UDC Assembly
(Use with 19D438676G5
Front Cover Assembly.)



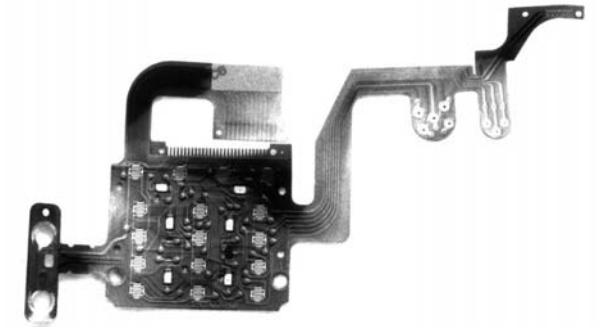
19D438658P2
Keypad Flex Circuit
(Use with 19D438676G5
Front Cover Assembly.)



19D902814P1
LCD Board Assembly
(Use with 19D903620G1
Front Cover Assembly.)

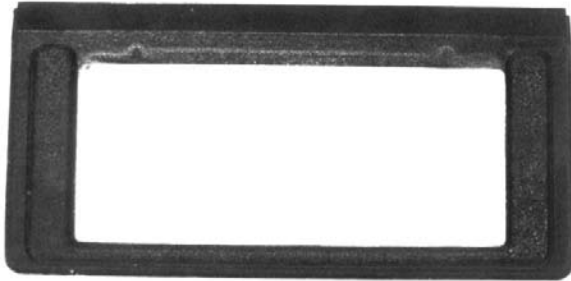


19C337149G2
UDC Assembly
(Use with 19D903620G1
Front Cover Assembly.)



19D902810P1
Keypad Flex Circuit
(Use with 19D903620G1
Front Cover Assembly.)

MISCELLANEOUS PARTS

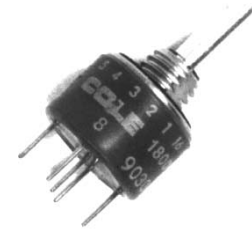


19D438679P1
LCD Escutcheon

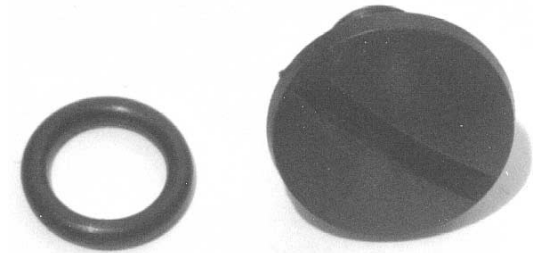
19B801625P1
Gasket For LCD Escutcheon



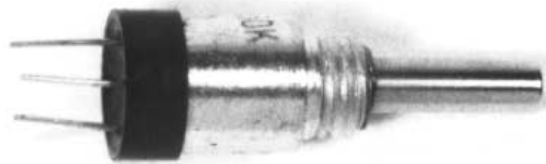
19B235116G1
Speaker Flex Circuit



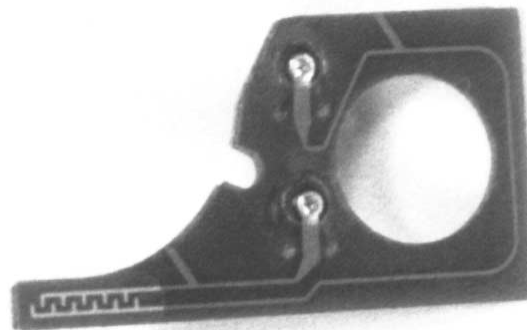
19A149612P1
Group/Channel Switch



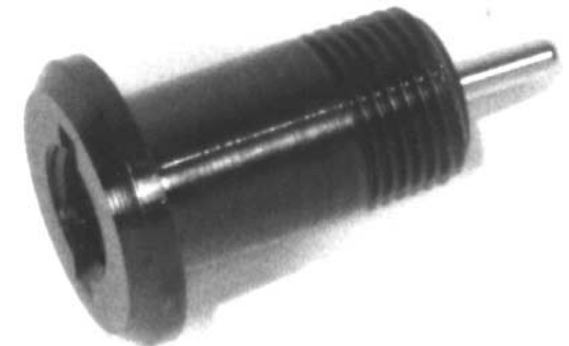
19A149423G1
Antenna Opening Plug



19A134528P4
Volume Potentiometer



19A149627G1
Emergency Switch Board
(Use with 19D438676G5
Front Cover Assembly.)



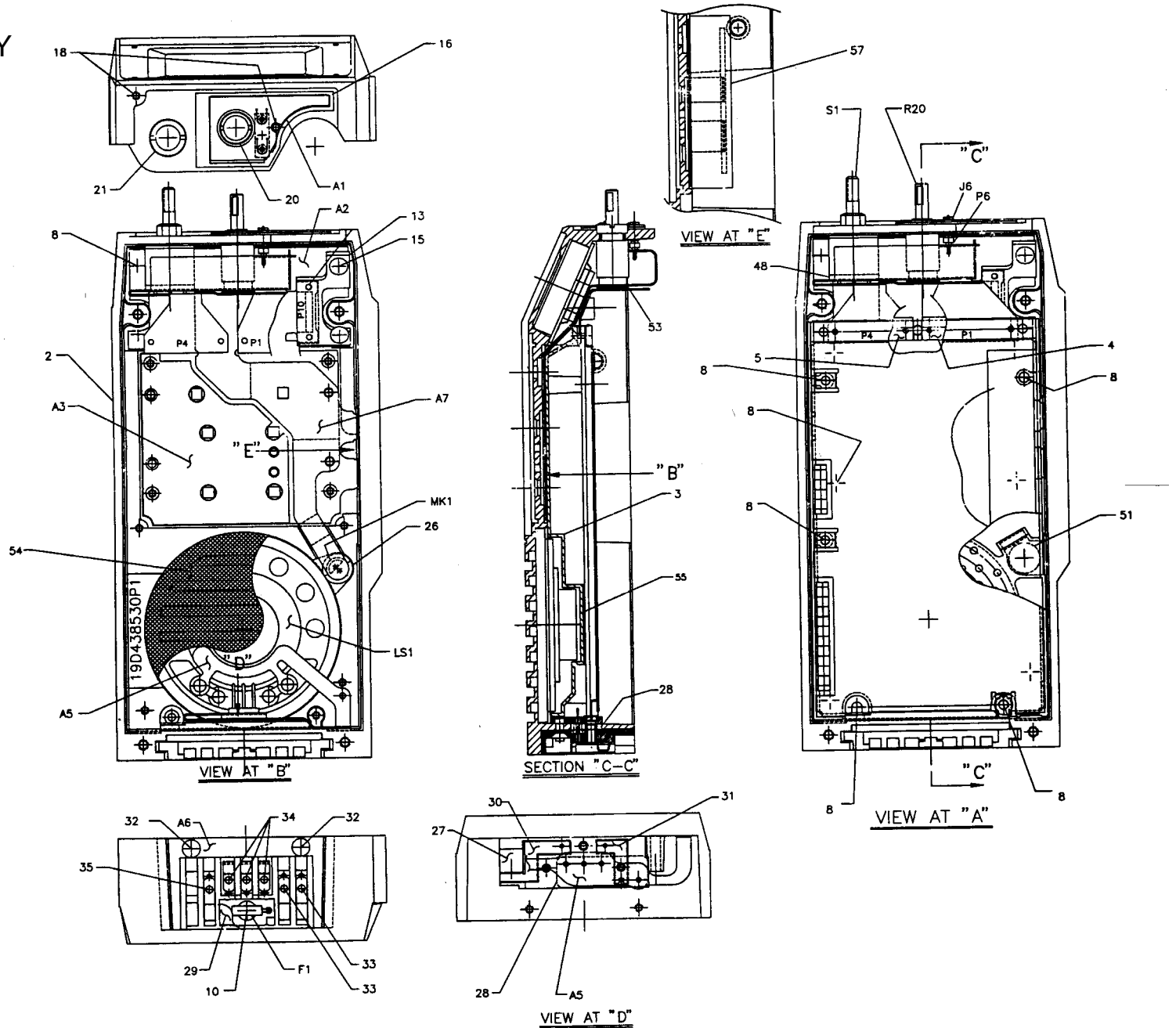
19B801618P1
Antenna Insert

EDACS AEGIS™ M-PA PERSONALS

PRODUCT CODE PA

MECHANICAL PARTS BREAKDOWN

FRONT COVER ASSEMBLY
(19D438676G5 ONLY)



EDACS AEGIS™ M-PA PERSONALS
PRODUCT CODE PA

MECHANICAL PARTS BREAKDOWN
FRONT COVER ASSEMBLY 19D438676G5 ONLY

ITEM	PART NUMBER	DESCRIPTION
2	19C851782P1	Front Cover (Casting Only)
3	19D438663P1	Shield (Under Control Board)
4	19B235140P1	Pad (Used at UDC Flex Connector)
5	19B235140P2	Pad (Used at Keypad Flex Connector)
8	19A705701P104	M2 x 4mm Pan-Head Machine Screw (Qty 8)
10	19A705940P104	M2 x 4mm Flat-Head Machine Screw
13	19D903484P1	Clamp
15	19A705937P105	M2 x 6mm Oval-Head Machine Screw (Qty 2)
16	19D438670P1	Red Rubber Keypad
18	19A705937P105	M2 x 6mm Oval-Head Machine Screw (Qty 2)
20	19A127319P9	1/4-32 Slotted Round Nut
21	19A127319P2	1/4-28 Slotted Round Nut
26	19C337462P1	Rubber Microphone Boot
27	19D438666P1	Baseplate
28	19C337134P1	Seal
29	19B235074P1	Fuse Cover
30	19B235124P1	Contact
31	19B235125P1	Contact
32	19A702362P102	M2 x 2.75mm Flat-Head Machine Screw (Qty 2)
33	19A705701P6	M1.6 x 6mm Pan-Head Machine Screw (Qty 2)

EDACS AEGIS™ M-PA PERSONALS
PRODUCT CODE PA

MECHANICAL PARTS BREAKDOWN
FRONT COVER ASSEMBLY 19D438676G5 ONLY

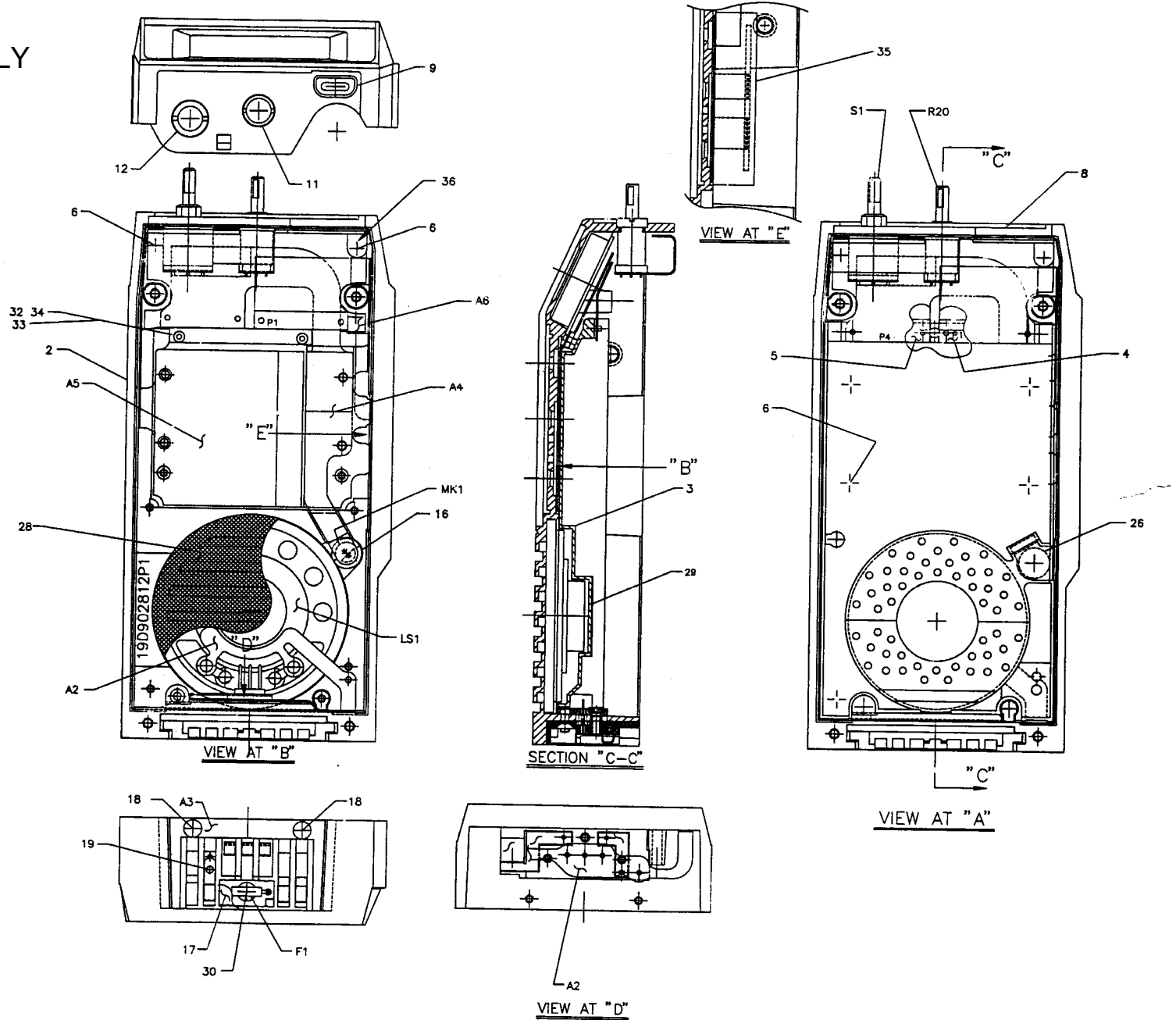
ITEM	PART NUMBER	DESCRIPTION
34	19A705701P7	M1.6 x 7mm Pan-Head Machine Screw (Qty 3)
35	19A705701P4	4mm Pan-Head Machine Screw
48	19A149706P1	Spacer
51	344A3243P1	Insulator
53	19B234763P22	Pad
54	19C851997P1	Speaker Gasket
55	344A3854P1	Insulator
57	19B234763P27	Pad
A1	19A149627G1	Emergency Switch Board
A2	19C337096G1	LCD Board Assembly
A3	19D438658P2	Keypad Flex Circuit
A5	19B235116G1	Speaker Flex Circuit
A6	19B235165G1	Baseplate Assembly
A7	19C337149G1	UDC Assembly
F1	19A702169P11	Fuse
S1	19A149612P1	Group/Channel Switch
LS1	19A149673P1	Speaker
MK1	19A701301P3	Microphone Cartridge
R20	19A134528P4	Volume Potentiometer

EDACS AEGIS™ M-PA PERSONALS

PRODUCT CODE PA

MECHANICAL PARTS BREAKDOWN

FRONT COVER ASSEMBLY
(19D903620G1 ONLY)



EDACS AEGIS™ M-PA PERSONALS
PRODUCT CODE PA

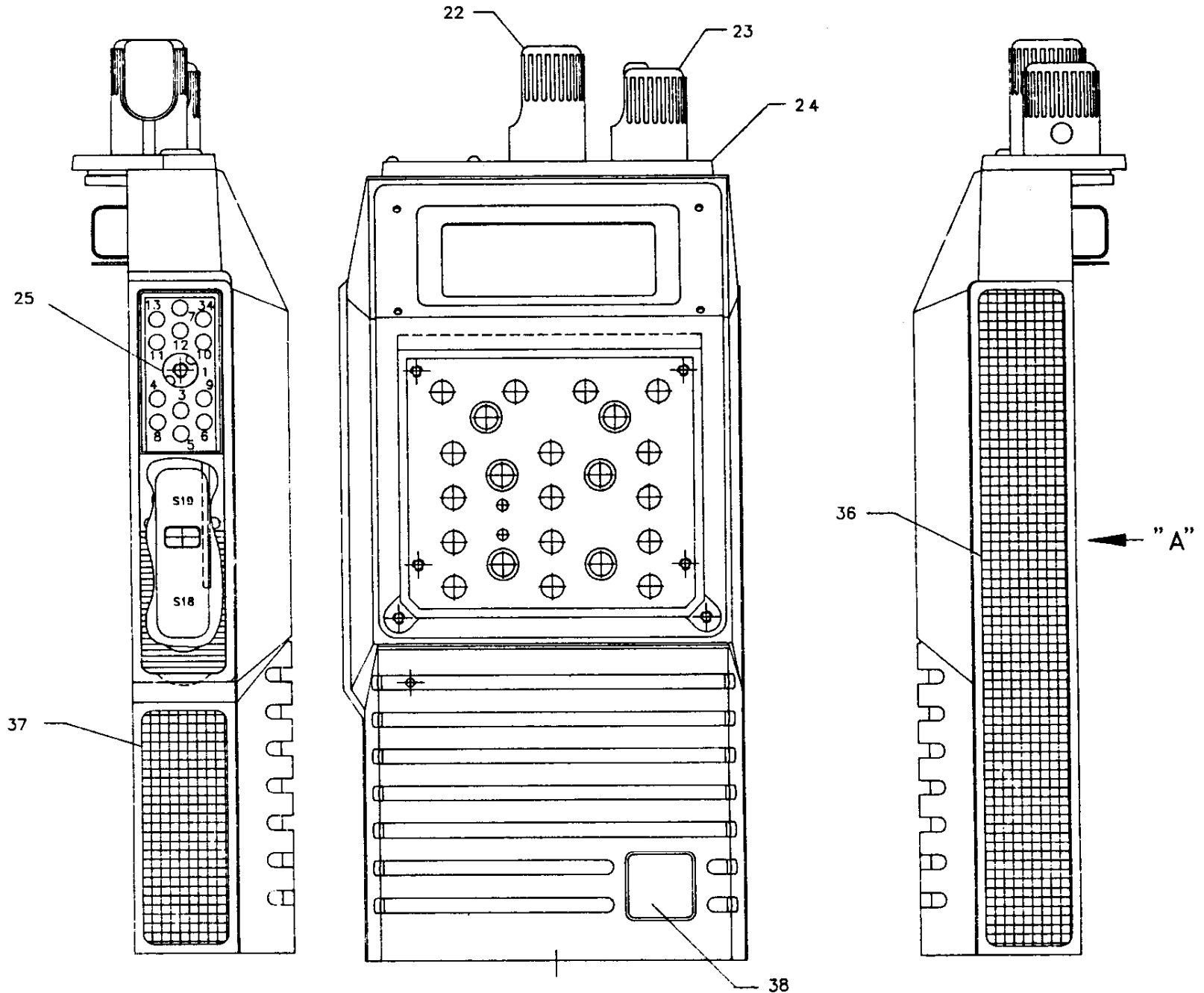
FRONT COVER ASSEMBLY (19D903620G1 ONLY) MECHANICAL PARTS BREAKDOWN

ITEM	PART NUMBER	DESCRIPTION
2	19D902812P1	Front Cover (Casting Only)
3	19D902813P1	Shield (Under Control Board)
4	19B235140P1	Pad (Used at UDC Flex Connector)
5	19B235140P2	Pad (Used at Keypad Flex Connector)
6	19A705701P104	M2 x 4mm Pan-Head Machine Screw (Qty 9)
8	19B802000P1	Adhesive Top Plate
9	19C852139P2	Red Rubber Emergency Plunger
11	19A127319P1	1/4-20 Slotted Round Nut
12	19A127319P2	1/4-28 Slotted Round Nut
16	19C337462P1	Rubber Microphone Boot
17	19B235074P1	Fuse Cover
18	19A702362P102	M2 x 2.75mm Flat-Head Machine Screw (Qty 2)
19	19A705701P4	M1.6 x 4mm Pan-Head Machine Screw
26	344A3243P1	Insulator
28	19C851997P1	Speaker Gasket
29	344A3854P1	Insulator
30	19A705940P104	M2 x 4mm Flat-Head Machine Screw
32	344A4026P1	Pressure Bar
33	19A705701P6	M1.6 x 6mm Pan-Head Machine Screw (Qty 2)
34	344A4027P1	Pressure Pad
35	19B234763P27	Pad
36	19B801968P1	Emergency Switch Support
A2	19B235116G1	Speaker Flex Circuit
A3	19D902818P1	Baseplate Assembly
A4	19C337149G2	UDC Assembly
A5	19D902810P1	Keypad Flex Circuit
A6	19D902814P1	LCD Board
F1	19A702169P11	Fuse
S1	19A149612P1	Group/Channel Switch
LS1	19A149673P1	Speaker
MK1	19A701301P3	Microphone Cartridge
R20	19A134528P4	Volume Potentiometer

EDACS AEGIS™ M-PA PERSONALS
PRODUCT CODE PA

MECHANICAL PARTS BREAKDOWN

FRONT COVER
ASSEMBLY
(19D438676G5 &
19D903620G1)



EDACS AEGIS™ M-PA PERSONALS
PRODUCT CODE PA

MECHANICAL PARTS BREAKDOWN
FRONT COVER ASSEMBLY

ITEM	PART NUMBER	DESCRIPTION
22	19C852161G2	Volume Knob Assembly
23	19C852161G1	Group/Channel Knob Assembly
24	19D438669P1	Control Top Cover (19D438676G5 Only)
	19D902815P1	Top Panel (19D903620G1 Only)
25	19A149546P1	UDC Nut
36	19B801539P3	Friction Pad
37	19B801539P4	Friction Pad
38	19B235139P1	GE Nameplate*

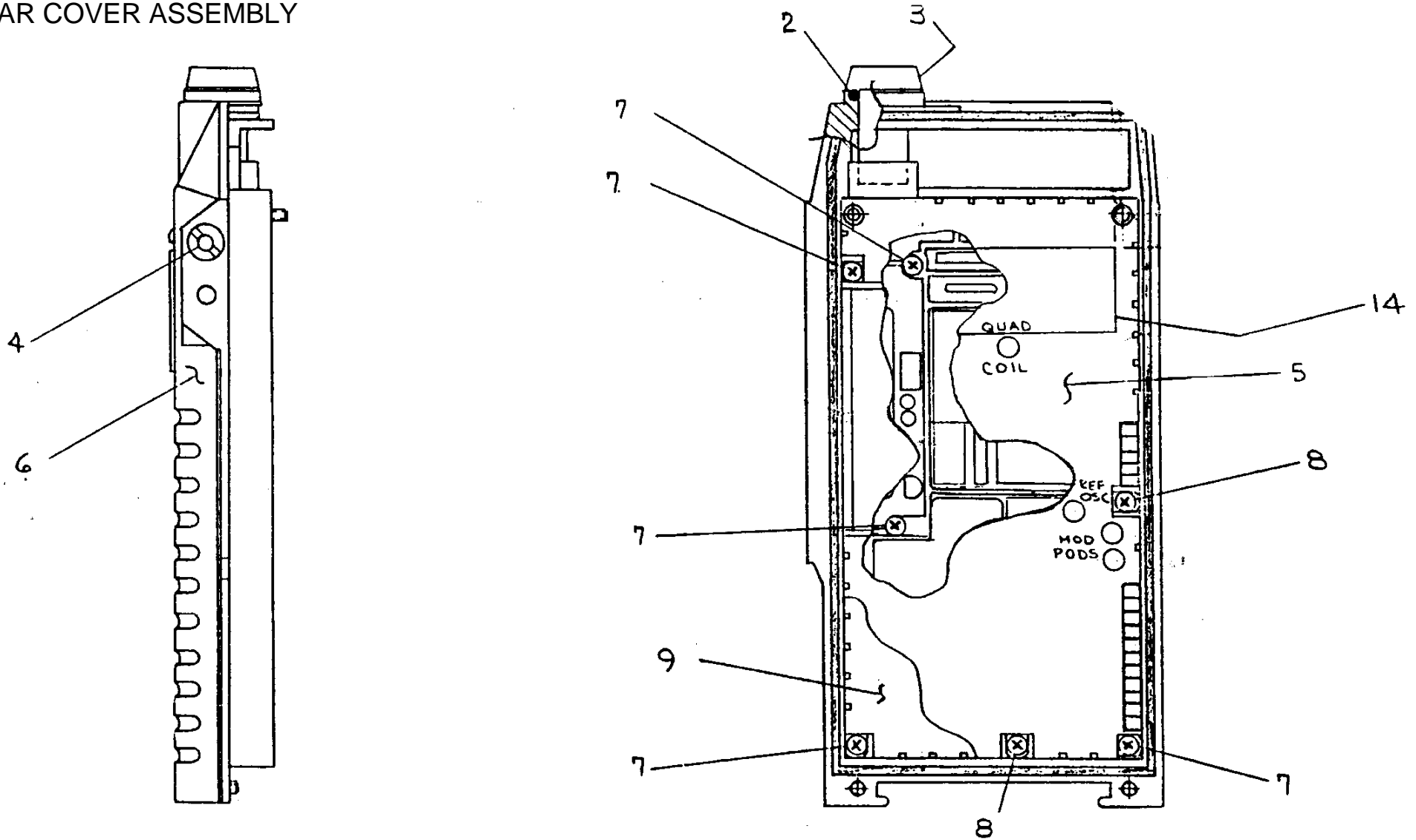
*Not included in either front cover assembly-must be ordered separately.

EDACS AEGIS™ M-PA PERSONALS

PRODUCT CODE PA

MECHANICAL PARTS BREAKDOWN

REAR COVER ASSEMBLY



THIS IS A COMPOSITE VIEW FOR ALL FREQUENCY BANDS. CONSULT PARTS CHART FOR APPLICATION TO YOUR BAND. (ITEM NUMBERS MAY DIFFER FROM MAINTENACE MANUAL.)

EDACS AEGIS™ M-PA PERSONALS
 PRODUCT CODE PA

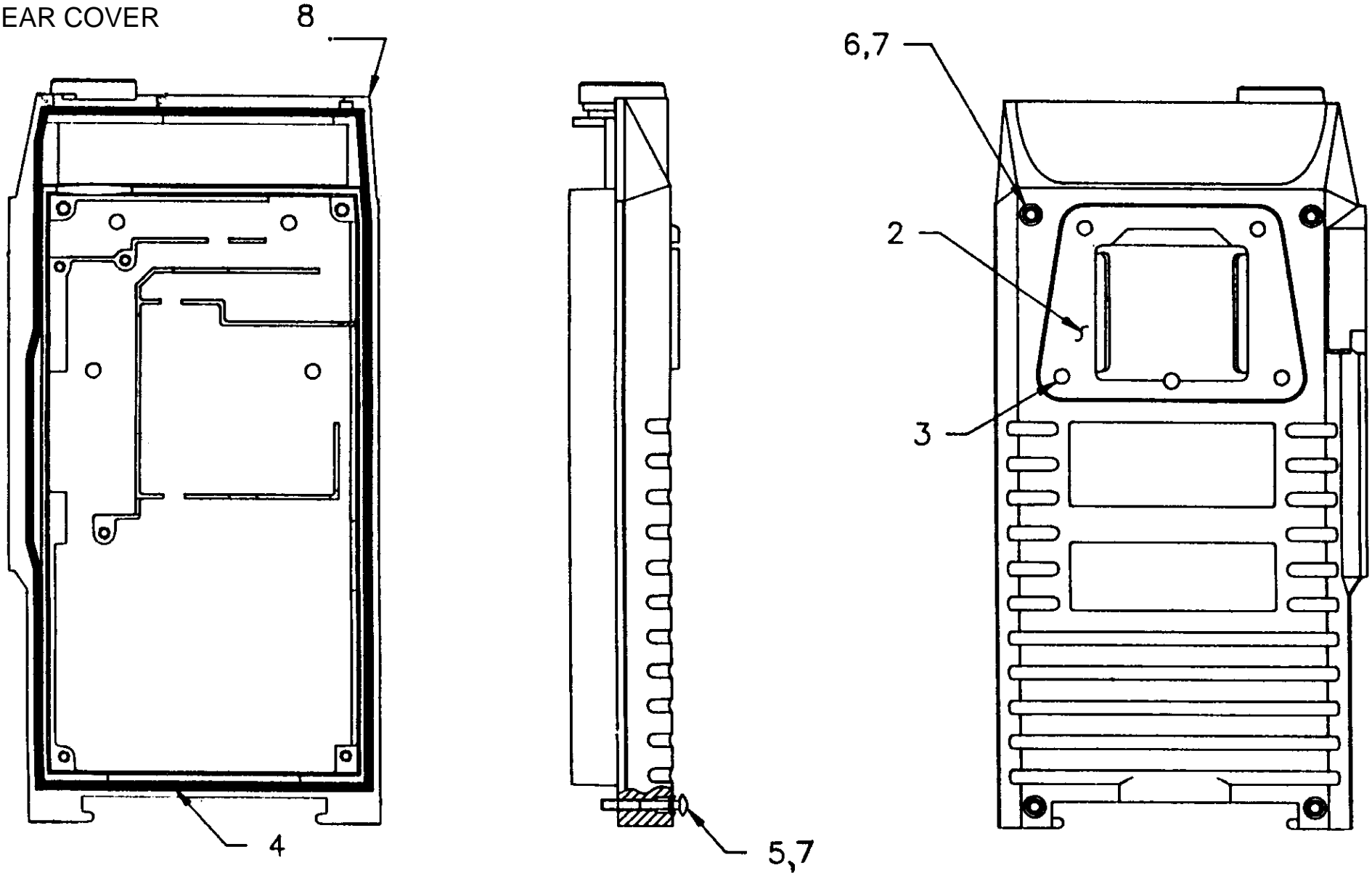
MECHANICAL PARTS BREAKDOWN
REAR COVER ASSEMBLY

ITEM	PART NUMBER	DESCRIPTION
2	19A115983P16	Rubber O-Ring
3	19B801618P1	Antenna Insert
4	19B235133P1	UDC RF Connector
5	19D438535P1	Shield (HB, UHF)
	19D438535P2	Shield (800 MHz)
6	19B801598G1	Rear Cover (HB, UHF)
	19B801598G2	Rear Cover (800 MHz)
7	19A705701P114	M2 x 14mm Pan-Head Machine Screw (HB, UHF Qty 5; 800 MHz Qty 8)
8	19A705701P104	M2 x 4mm Pan-Head Machine Screw (HB, UHF Qty 2)
9	19D902326P1	Tracking Card
14	19B234763P17	Pad (HB, UHF)

EDACS AEGIS™ M-PA PERSONALS
PRODUCT CODE PA

MECHANICAL PARTS BREAKDOWN

REAR COVER



EDACS AEGIS™ M-PA PERSONALS
PRODUCT CODE PA

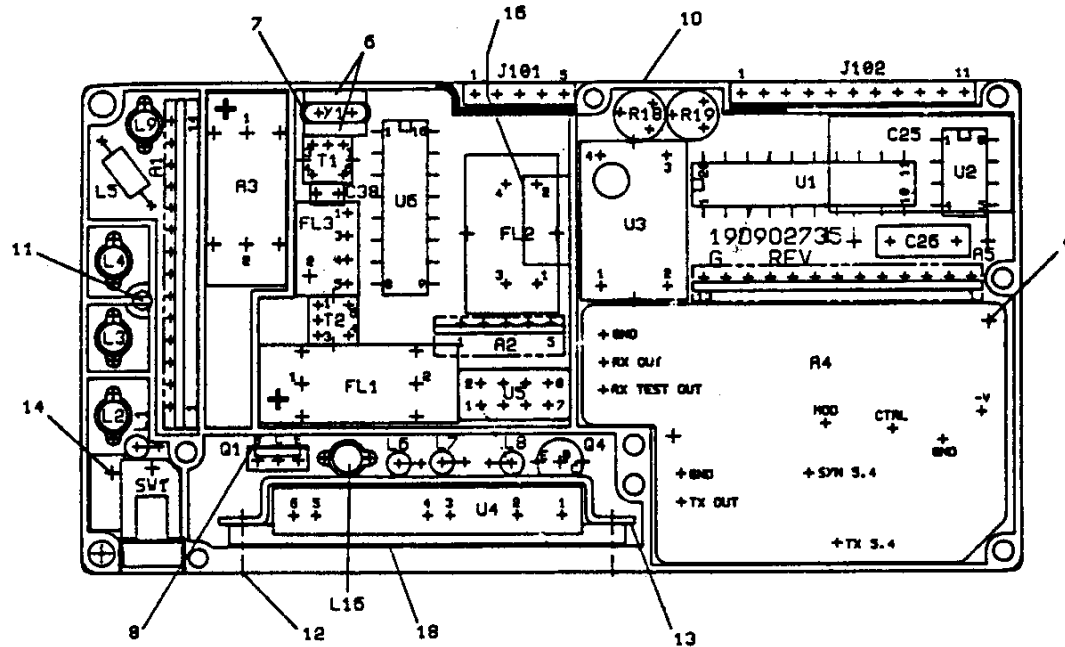
MECHANICAL PARTS BREAKDOWN

REAR COVER

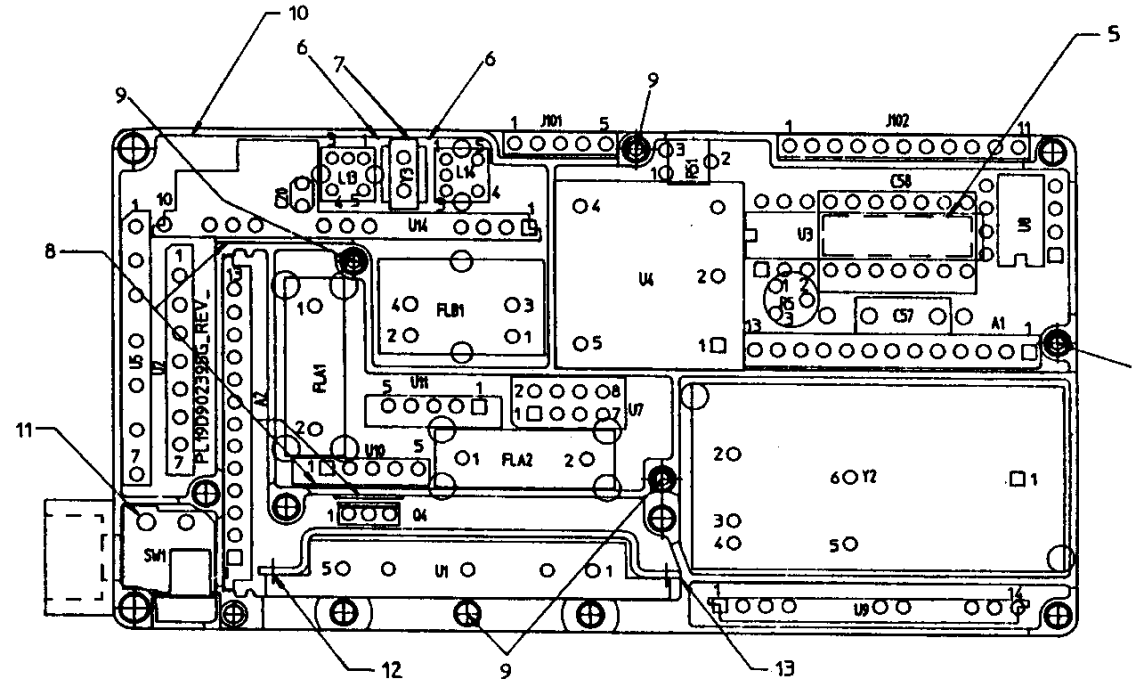
ITEM	PART NUMBER	DESCRIPTION
2	19B235075P2	Receptacle Plate
3	N327P9009Y6	Rivet
4	19D902730P1	Gasket
5	19A705728P1	M2.6 x 14mm Oval-Head Machine Screw (Qty 2)
6	19A705728P2	M2.6 x 23mm Oval-Head Machine Screw (Qty 2)
7	19A701365P7	Nylon Washer (Qty 4)
8	19C851743G1	Cover (HB, UHF)
	19C851743G2	Cover (800 MHz)

MECHANICAL PARTS BREAKDOWN

RF BOARD (HB, UHF)



RF BOARD (800 MHz)



EDACS AEGIS™ M-PA PERSONALS
PRODUCT CODE PA

MECHANICAL PARTS BREAKDOWN
RF BOARD

ITEM	PART NUMBER	DESCRIPTION
5	19A701748P1	Tape (Bonds C58 to U3) (800 MHz)
6	19A149008P1	Pad (Supports Y1) (HB, UHF Qty 2)
	19A149008P1	Pad (Supports Y3) (800 MHz Qty 2)
7	19A149009P1	Pad (Supports Y1) (HB, UHF)
	19A149009P1	Pad (Supports Y3) (800 MHz)
8	19A121175P39	Insulator (Used with Q1) (HB, UHF)
	19A121175P46	Insulator (Used with Q4, U10, U14) (800 MHz Qty 3)
9	19A705701P104	M2 x 4mm Pan-Head Machine Screw (HB, UHF Qty 2; 800 MHz Qty 5)
10	19D438351P1	Eggcrate Casting (HB, UHF)
	19D903562P1	Eggcrate Casting (800 MHz)
11	19A705701P104	M2 x 4mm Pan-Head Machine Screw (HB, UHF Qty 4)
	19A705853P1	Pan-Head Tap Screw (800 MHz)
12	19A705701P206	M2.5 x 6mm Pan-Head Machine Screw (Qty 2)
13	19B234990P1	PA Module Support
14	19A705853P1	Pan-Head Tap Screw (HB, UHF)
16	19A705871P2	Ground Clip (HB, UHF)
18	19C851898P1	Ground Shim (HB, UHF)

SERVICE ACCESSORIES

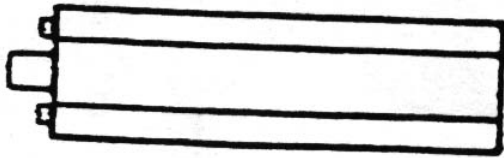
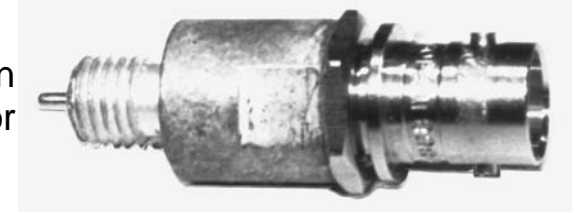
RECOMMENDED LIST OF ITEMS

ORDERING NUMBER	DESCRIPTION
19B801496G2	RF Antenna Adapter
K19/A4WX01541	UDC Test Cable
BKB 191 205/9	Dummy Battery
K19/A4WX01542	UDC/RF Test Cable
K19/A4WX01544	RF/Logic Extender Cable
K19/A4WX01504	UDC Connector Kit
TQ0609A	Audio Input/Output Test Box
EC2001	Temp Controlled Solder Station
TQ3370	Universal Radio Programmer
TQ3370-220	Universal Radio Programmer (220V Operation)
TQ3311	Radio Programming Cable
SPK9010	Front Cover Test Kit
SPK9011	Control Board Extender Kit
19B801733P1	UDC Spanner Wrench
337097G1B	Antenna Connector Tool (For Removing Antenna Jack)

SERVICE ACCESSORIES

RECOMMENDED LIST OF ITEMS

19B801496G2 (**ST3559**) RF ANTENNA ADAPTER furnishes a BNC-Female connection to the Antenna Jack on top of M-PA portables for power or sensitivity measurements, or for connection to an external Antenna.



19B801733P1 UDC SPANNER WRENCH Is used to remove UDC nut in UDC connector.

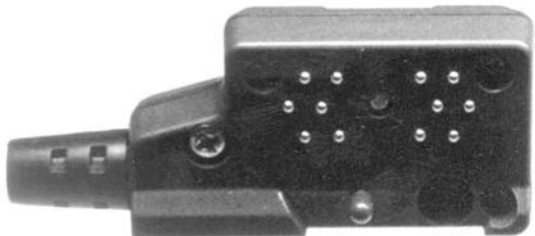
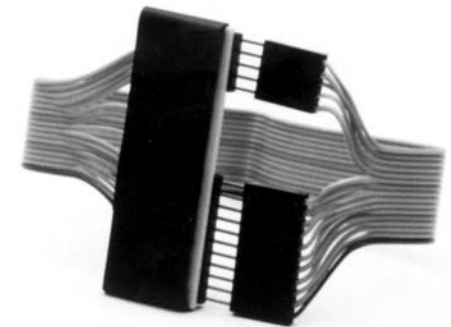
SERVICE ACCESSORIES

BKB 191 205/9 DUMMY BATTERY allows the Service Personnel to measure RF power output and Receiver measurements while the radio is connected to a Bench Power Supply, rather than to a battery.



K19/A4WX01542 UDC/RF TEST CABLE is terminated in a BNC-Male, connected to the radio antenna connection on the radio UDC Jack. This test cable allows Transmitter or Receiver measurements made to the UDC. It also allows connection for use with external antennas.

K19/A4WX01544 RF/LOGIC EXTENDER CABLE allows the operation and the testing of radios with the unit open and the logic board separated from the RF Assembly.



K19/A4WX01504 UDC CONNECTOR KIT can connect to RF, TX, RX, or PTT connections on the UDC. Could be used to terminate speaker/mike/antenna cable.

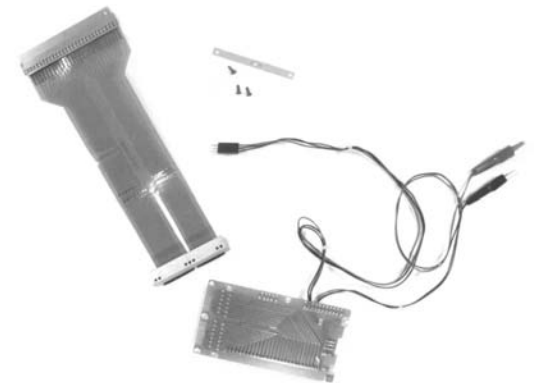
SERVICE ACCESSORIES

TQ0609A AUDIO INPUT/OUTPUT TEST BOX allows the operation and testing of radios with the unit closed while accessing both transmitter and receiver audio and PTT Keying. (Requires K19/A4WX01541 Universal Test Cable below).



SPK9010 FRONT COVER TEST KIT (includes front cover test cable, LCD extender plate and clamp, LCD test cable, and exerciser and display test program on 5 1/4" diskette).

SPK9011 CONTROL BOARD EXTENDER KIT (includes adapter board and control board extender for operation of the control board outside the front cover).



K19/A4WX01541 UNIVERSAL TEST CABLE allows users to access radio UDC functions

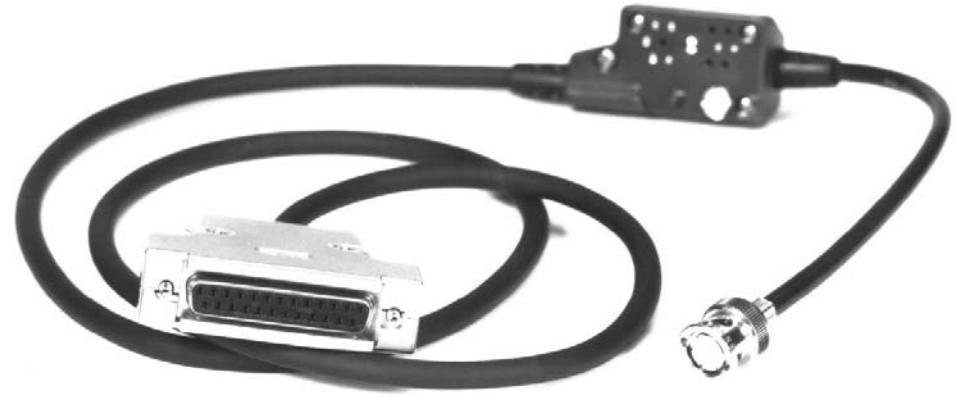
EDACS AEGIS™ M-PA PERSONALS

PRODUCT CODE PA



TQ3370
PC Programming Adapter Kit

- | | |
|-------------|-------------------------|
| 19B800850P2 | AC Power Supply Adapter |
| 19D438367G2 | Program Adapter |
| 19B235027P1 | Cable |
| LBI-38858 | Instruction Manual |



TQ3311
19A705477P2
PC Programming Cable
(Interfaces between radio and interface box)

- | | |
|---------------|------------|
| K19/A4WL08711 | Thumbscrew |
|---------------|------------|

MAINTENANCE MANUALS

BAND	DESCRIPTION	MANUAL #
UHF	AEGIS EDACS Radio	LBI-38826
800 MHz	AEGIS EDACS Radio	LBI-38827
All	19D903081G1 VG/AEGIS/EDACS Control Board	LBI-38828
All	344A3659P3 AEGIS DES Board	LBI-38829
All	344A3659P4 AEGIS Voice Guard/VGE Board	LBI-38830
All	SPK9010 and SPK9011 Test Accessory Kits	LBI-38518

EDACS M-PA PERSONALS

PRODUCT CODE PA



SCAN MODEL



SELECT MODEL



SYSTEM MODEL

PRODUCT PROGRAMMING

ORDERING NUMBER	DESCRIPTION
<p>TQ3370</p> <p>TQ3340 or TQ3384 or TQ3385</p> <p>*</p> <p>TQ3311</p>	<p>PC Programming Interface Adapter Kit. Includes Serial Interface Unit, PC to Serial Interface Unit Cable, and Auxiliary Power Supply. (Replaces TQ3310)</p> <p>Radio Programming Software (DOS Version)</p> <p>Programmer CV Windows Programming Software EDACS</p> <p>Programmer Windows Programming Software EDACS</p> <p>Note: See Page 28.1-6 for description of above software packages</p> <p>PC Programming Cable. Interface between radio and interface box.</p>

EDACS M-PA PERSONALS

PRODUCT CODE PA

PRODUCT NOMENCLATURE

HIGH BAND

RADIO CONFIGURATION	FREQUENCY RANGE (MHz)	RF POWER	PACKAGE NUMBER	COMBINATION NUMBER
System Models	136-150.8	6W	PAGTA6	PAG00X

UHF BAND

RADIO CONFIGURATION	FREQUENCY RANGE (MHz)	RF POWER	PACKAGE NUMBER	COMBINATION NUMBER
Select Models	403-440	5W	PAPTA4	PAP00X
	440-470	5W	PAUTA4	PAU00X
Scan Models	403-440	5W	PAPTA5	PAP00X
	440-470	5W	PAUTA5	PAU00X
System Models	403-440	5W	PAPTA6	PAP00X
	440-470	5W	PAUTA6	PAU00X

800 BAND

RADIO CONFIGURATION	FREQUENCY RANGE (MHz)	RF POWER	PACKAGE NUMBER	COMBINATION NUMBER
Select Models	806-870	3W	PAPST4	PAZ00X
Scan Models	806-870	3W	PAPST5	PAZ00X
System Models	806-870	3W	PAPST6	PAZ00X

EDACS M-PA PERSONALS

PRODUCT CODE PA

900 BAND

RADIO CONFIGURATION	FREQUENCY RANGE (MHz)	RF POWER	PACKAGE NUMBER	COMBINATION NUMBER
Select Models	896-941	2W	PA903	PA900X
Scan Models	896-941	2W	PA904	PA900X
System Models	896-941	2W	PA905	PA900X

COMPLETE BOARD ASSEMBLIES

HIGH BAND

PART NUMBER	BOARD DESCRIPTION	FREQUENCY RANGE (MHz)	RF POWER
19D903081G1	EDACS Control Board	—	—
19D902735G1	RF Board	136-150.8	6W
19C337097G1	Rear Cover Assembly (incl. RF board)	136-150.8	6W

UHF BAND

PART NUMBER	BOARD DESCRIPTION	FREQUENCY RANGE (MHz)	RF POWER
19D903081G1	EDACS Control Board	—	—
19D902282G1	RF Board	403-440	5W
19D902282G13	RF Board	440-470	5W
19C337097G4	Rear Cover Assembly (incl. RF board)	403-440	5W
19C337097G5	Rear Cover Assembly (incl. RF board)	440-470	5W

EDACS M-PA PERSONALS

PRODUCT CODE PA

800 BAND

PART NUMBER	BOARD DESCRIPTION	FREQUENCY RANGE (MHz)	RF POWER
19D903081G1 188D5111G1 19C337097G12	EDACS Control Board RF Board Rear Cover Assembly (incl. RF board)	— 806-870	— 3W

900 BAND

PART NUMBER	BOARD DESCRIPTION	FREQUENCY RANGE (MHz)	RF POWER
19D902628G3 19D902451G1 19C337097G9	EDACS Control Board RF Board Rear Cover Assembly (incl. RF board)	896-941 896-941 896-941	— 2W 2W

EDACS M-PA PERSONALS

PRODUCT CODE PA

RF POWER MODULES

BAND	PART NUMBER	CIRCUIT SYMBOL	CIRCUIT FUNCTION	SIMILAR TO
HB	19A705774P3	U4	136-150.8 MHz Power Amplifier	SHW1026
UHF	19A705419P1 19A705419P2	U4 U4	403-440 MHz Power Amplifier 440-470 MHz Power Amplifier	MHW-707-1 MHW-707-2
800 MHz	RYTUA90107/1 19A705962P2	U1 U1	803-870 MHz Power Amplifier (used in 188D5111G1 RF Board) 806-870 MHz Power Amplifier (used in 19D902395G5 RF Board)	M67706
900 MHz	19A705962P2	U4	896-941 MHz Power Amplifier	M67706U

EDACS M-PA PERSONALS

PRODUCT CODE PA

FREQUENCY MODULES

BAND	PART NUMBER	CIRCUIT SYMBOL	DESCRIPTION	BOARD WHERE USED
HB	19A702511G27	Y1	8.000 MHz Crystal	Control Board
	19A702511G61	Y2	2.000 MHz Crystal	Control Board
	19A702511G26	Y3	11.059 MHz Crystal	Control Board
	19A705376P5	Y1	45.455 MHz Crystal	RF Board
	19B801351P10	U3	Reference Oscillator	RF Board
UHF	19A702511G27	Y1	8.000 MHz Crystal	Control Board
	19A702511G61	Y2	2.000 MHz Crystal	Control Board
	19A702511G26	Y3	11.059 MHz Crystal	Control Board
	19A705376P5	Y1	45.455 MHz Crystal (UHF)	RF Board
	19B801351P15	U3	Reference Oscillator	RF Board
800	19A702511G27	Y1	8.000 MHz Crystal	Control Board
	19A702511G61	Y2	2.000 MHz Crystal	Control Board
	19A702511G26	Y3	11.059 MHz Crystal	Control Board
	19C852149G1	Y2	VCO	RF Board
	19A705376P7	Y3	45.4675 MHz Crystal	RF Board
	19B801351P7	U4	Reference Oscillator	RF Board
900	19A702511G26	Y1	11.059 MHz Crystal	Control Board
	19A702511G44	Y2	5.529 MHz Crystal	Control Board
	19A702511G27	Y3	8.000 MHz Crystal	Control Board
	19A702511G61	Y4	2.000 MHz Crystal	Control Board
	19B233066G14	Y1	39.045 MHz Crystal	RF Board
	19B801351P16	U6	Reference Oscillator	RF Board
	19A705616P3	U15	VCO	RF Board

EDACS M-PA PERSONALS
PRODUCT CODE PA

PROGRAMMABLE IC'S MICROPROCESSORS

BAND	PART NUMBER	CIRCUIT SYMBOL	DESCRIPTION	BOARD WHERE USED
HB, UHF 800	349A9567G1	U7	PROM Kit	Control Board
	19A705963P2	U15	EEPROM (Flash)	Control Board
	344A4600P101	U17	EEPROM	Control Board
	19A705557P5	U18	Masked Microprocessor	Control Board
900	19A149861G2	U18	PROM Kit	Control Board
	19A705963P2	U2	EEPROM (Flash)	Control Board
	19A705557P3	U4	Microprocessor	Control Board

EDACS M-PA PERSONALS
PRODUCT CODE PA

MAINTENANCE MANUALS

BAND	DESCRIPTION	MANUAL #
HB	136-174 MHz System Radio	LBI-38603
UHF	403-470 MHz Select Radio 403-470 MHz ScanRadio 403-470 MHz System Radio	LBI-38600 LBI-38601 LBI-38602
800	806-870 MHz Select Radio 806-870 MHz ScanRadio 806-870 MHz System Radio	LBI-38460 LBI-38460 LBI-38460
900	896-941 MHz Select Radio 896-941 MHz ScanRadio 896-941 MHz System Radio	LBI-38575 LBI-38455 LBI-38575

REFER TO SECTION 13.2-PG 4 FOR ACCESSORIES AND PARTS

EDACS MTL PERSONALS

PRODUCT CODE PA



PRODUCT PROGRAMMING

ORDERING NUMBER	DESCRIPTION
<p>TQ3370</p> <p>TQ3340 or TQ3384 or TQ3385</p> <p>*</p> <p>TQ3311</p>	<p>PC Programming Interface Adapter Kit. Includes Serial Interface Unit, PC to Serial Interface Unit Cable, and Auxiliary Power Supply. (Replaces TQ3310)</p> <p>Radio Programming Software (DOS Version)</p> <p>Programmer CV Windows Programming Software EDACS</p> <p>Programmer Windows Programming Software EDACS</p> <p>Note: See Page 28.1-6 for description of above software packages</p> <p>PC Programming Cable. Interface between radio and interface box.</p>

EDACS MTL PERSONALS

PRODUCT CODE PA

PRODUCT NOMENCLATURE

800 BAND

RADIO CONFIGURATION	FREQUENCY RANGE (MHz)	RF POWER	PACKAGE NUMBER	COMBINATION NUMBER
16 Channel Capacity Scan Model	806-870	2.5W	PAMTZ5	PAZ00X

900 BAND

RADIO CONFIGURATION	FREQUENCY RANGE (MHz)	RF POWER	PACKAGE NUMBER	COMBINATION NUMBER
16 Channel Capacity Scan Model	896-941	2W	PA901	PA900X
System Model	896-941	2W	PA902	PA900X

COMPLETE BOARD ASSEMBLIES

800 BAND

PART NUMBER	BOARD DESCRIPTION	FREQUENCY RANGE (MHz)	RF POWER
19D903081G1	Control Board	—	—
19D902395G7	RF Board	806-870	2.5W
19C337097G14	Rear Cover Assembly (incl. RF board)	806-870	2.5W

EDACS MTL PERSONALS

PRODUCT CODE PA

900 BAND

PART NUMBER	BOARD DESCRIPTION	FREQUENCY RANGE (MHz)	RF POWER
19D902628G3	Control Board	—	—
19D902451G1	RF Board	896-941	2.0W
19C337097G9	Rear Cover Assembly (incl. RF board)	896-941	2.0W

RF POWER MODULES

BAND	PART NUMBER	CIRCUIT SYMBOL	CIRCUIT FUNCTION	SIMILAR TO
800	19A705962P3	U1	806-870 MHz Power Amplifier	
900	19A705962P2	U4	896-941 MHz Power Amplifier	M67706U

EDACS MTL PERSONALS
PRODUCT CODE PA

FREQUENCY MODULES

BAND	PART NUMBER	CIRCUIT SYMBOL	DESCRIPTION	BOARD WHERE USED
800	19A702511G27	Y1	8.000 MHz Crystal	Control Board
	19A702511G61	Y2	2.000 MHz Crystal	Control Board
	19A702511G26	Y3	11.059 MHz Crystal	Control Board
	19C852149G1	Y2	VCO	RF Board
	19A705376P7	Y3	45.4675 MHz Crystal	RF Board
	19B801351P17	U4	Reference Oscillator	RF Board
900	19A702511G26	Y1	11.059 MHz Crystal	Control Board
	19A702511G44	Y2	5.529 MHz Crystal	Control Board
	19A702511G27	Y3	8.000 MHz Crystal	Control Board
	19A702511G61	Y4	2.000 MHz Crystal	Control Board
	19B233066G14	Y1	39.045 MHz Crystal	RF Board
	19B801351P16	U6	Reference Oscillator	RF Board
	19A705616P3	U15	VCO	RF Board

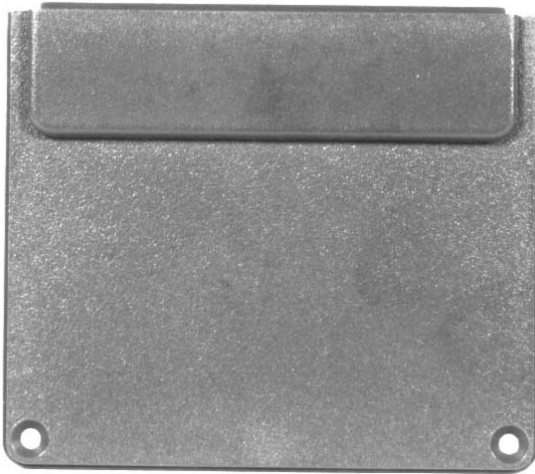
EDACS MTL PERSONALS
PRODUCT CODE PA

PROGRAMMABLE IC'S MICROPROCESSORS

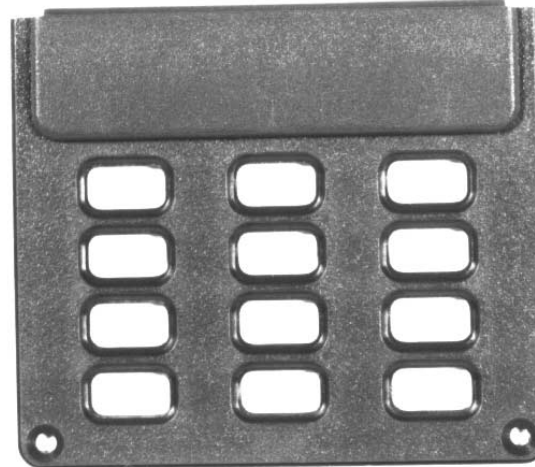
BAND	PART NUMBER	CIRCUIT SYMBOL	DESCRIPTION	BOARD WHERE USED
800	349A9567G1 19A705963P2 344A4600P101 19A705557P5	U7 U15 U17 U18	PROM Kit EEPROM (Flash) EEPROM Masked Microprocessor	Control Board Control Board Control Board Control Board
900	19A149861G2 19A705963P2 19A705557P3	U18 U2 U4	PROM Kit EEPROM (Flash) Microprocessor	Control Board Control Board Control Board

EDACS MTL PERSONALS
PRODUCT CODE PA

MISCELLANEOUS PARTS



19D902512P1
Basic Front Panel



19D902512P2
System Front Panel



19D902830P1
Select Front Panel



19D902264P3
Basic Keypad



19D902829P1
Select Keypad



19D902513P2
LCD Cover



19D902264P7
System Keypad

EDACS MTL PERSONALS
PRODUCT CODE PA

MAINTENANCE MANUALS

BAND	DESCRIPTION	MANUAL #
800	Maintenance Manual	LBI-38455
900	Maintenance Manual	LBI-38458

REFER TO SECTION 13.2-PG 4 FOR ACCESSORIES AND PARTS

CONVENTIONAL M-PA PERSONALS

PRODUCE CODE PA



SCAN MODEL



SELECT MODEL



SYSTEM MODEL

PRODUCT PROGRAMMING

ORDERING NUMBER	DESCRIPTION
TQ3370	PC Programming Adapter Kit. Includes Serial Interface Unit, PC to Serial Interface Unit Cable, and Auxiliary Power Supply. (Replaces TQ3310 and provides Flash Programming Capability.)
TQ3311	PC Programming Cable (Interface Module to M-PA Personals)
TQ3339	PC Programming Software (5 1/4" Disk)
TQ4339	PC Programming Software (3 1/2" Disk)

CONVENTIONAL M-PA PERSONALS

PRODUCE CODE PA

PRODUCT NOMENCLATURE

HIGH BAND

RADIO CONFIGURATION	FREQUENCY RANGE (MHz)	RF POWER	PACKAGE NUMBER	COMBINATION NUMBER
Select Models	136-150.8	6W	PAG01	PAGCSX
	146-162	6W	PAJ01	PAHCSX
	157-174	6W	PAH01	PAJCSX
Scan Models	136-150.8	6W	PAG02	PAGCDX
	146-162	6W	PAJ02	PAHCDX
	157-174	6W	PAH02	PAJCDX
System Models	136-150.8	6W	PAG03	PAGCPX
	146-162	6W	PAJ03	PAHCPX
	157-174	6W	PAH03	PAJCPX

CONVENTIONAL M-PA PERSONALS

PRODUCE CODE PA

UHF BAND

RADIO CONFIGURATION	FREQUENCY RANGE (MHz)	RF POWER	PACKAGE NUMBER	COMBINATION NUMBER
Select Models	403-440	5W	PAP01	PAPCSX
	440-470	5W	PAU01	PAUCSX
	470-494	5W	PAV01	PAVCSX
	492-512	5W	PAX01	PAXCSX
Scan Models	403-440	5W	PAP02	PAPCDX
	440-470	5W	PAU02	PAUCDX
	470-494	5W	PAV02	PAVCDX
	492-512	5W	PAX02	PAXCDX
System Models	403-440	5W	PAP03	PAPCPX
	440-470	5W	PAU03	PAUCPX
	470-494	5W	PAV03	PAVCPX
	492-512	5W	PAX03	PAXCPX

CONVENTIONAL M-PA PERSONALS

PRODUCE CODE PA

COMPLETE BOARD ASSEMBLIES

HIGH BAND

PART NUMBER	BOARD DESCRIPTION	FREQUENCY RANGE (MHz)	RF POWER
19D903081G1	Control Board	136-174	—
19D902735G1	RF Board	136-150.8	6W
19D902735G3	RF Board	146-162	6W
19D902735G5	RF Board	157-174	6W
19C337097G1	Rear Cover Assembly (incl. RF board)	136-150.8	6W
19C337097G2	Rear Cover Assembly (incl. RF board)	146-162	6W
19C337097G3	Rear Cover Assembly (incl. RF board)	157-174	6W

UHF BAND

PART NUMBER	BOARD DESCRIPTION	FREQUENCY RANGE (MHz)	RF POWER
19D903081G1	Control Board	403-512	—
19D902282G1	RF Board	403-440	5W
19D902282G13	RF Board	440-470	5W
19D902282G3	RF Board	470-492	5W
19D902282G8	RF Board	492-512	5W
19C337097G4	Rear Cover Assembly (incl. RF board)	403-440	5W
19C337097G5	Rear Cover Assembly (incl. RF board)	440-470	5W
19C337097G6	Rear Cover Assembly (incl. RF board)	470-492	5W
19C337097G7	Rear Cover Assembly (incl. RF board)	492-512	5W

CONVENTIONAL M-PA PERSONALS

PRODUCE CODE PA

RF POWER MODULES

BAND	PART NUMBER	CIRCUIT SYMBOL	CIRCUIT FUNCTION	SIMILAR TO
HB	19A705774P3	U4	136-150.8 MHz Power Amplifier	SHW1026
	19A705774P4	U4	146-174 MHz Power Amplifier	SHW1027
UHF	19A705419P1	U4	403-440 MHz Power Amplifier	MHW-707-1
	19A705419P2	U4	440-470 MHz Power Amplifier	MHW-707-2
	19A705419P3	U4	470-494 MHz Power Amplifier	MHW-707-3
	19A705419P4	U4	492-512 MHz Power Amplifier	MHW-707-4

FREQUENCY MODULES

BAND	PART NUMBER	CIRCUIT SYMBOL	DESCRIPTION	BOARD WHERE USED
HB	19A702511G35	Y1	4.0 MHz Crystal	Control Board 19D902349G5
	19A702511G27	Y1	8.000 MHz Crystal	Control Board 19D903081G1
	19A702511G61	Y2	2.000 MHz Crystal	Control Board 19D903081G1
	19A702511G26	Y3	11.059 MHz Crystal	Control Board 19D903081G1
	19A705376P5	Y1	45.455 MHz Crystal	RF Board
	19B801351P10	U3	Reference Oscillator	RF Board
UHF	19A702511G35	Y1	4.0 MHz Crystal	Control Board 19D902349G5
	19A702511G27	Y1	8.000 MHz Crystal	Control Board 19D903081G1
	19A702511G61	Y2	2.000 MHz Crystal	Control Board 19D903081G1
	19A702511G26	Y3	11.059 MHz Crystal	Control Board 19D903081G1
	19A705376P5	Y1	45.455 MHz Crystal (UHF)	RF Board
	19B801351P15	U3	Reference Oscillator	RF Board

CONVENTIONAL M-PA PERSONALS

PRODUCE CODE PA

PROGRAMMABLE IC'S MICROPROCESSORS

BAND	PART NUMBER	CIRCUIT SYMBOL	DESCRIPTION	BOARD WHERE USED
HB, UHF	349A9567G1 19A705963P2 344A4600P101 19A705557P5	U7 U15 U17 U18	PROM Kit EEPROM (Flash) EEPROM Masked Microprocessor	Control Board 19D903081G1 Control Board 19D903081G1 Control Board 19D903081G1 Control Board 19D903081G1
HB, UHF	19A705949G10 19A705950G11 344A4600P101	U10 U14 U11	Microprocessor Microprocessor EEPROM	Control Board 19D902349G5 Control Board 19D902349G5 Control Board 19D902349G5

CONVENTIONAL M-PA PERSONALS

PRODUCE CODE PA

MISCELLANEOUS PARTS



19D438668P2
System Front Control Panel



19D902264P1
Conventional System Keypad



19D438668P2
Scan Front Control Panel



19D902264P2
Conventional Scan Keypad



19D438668P3
Select Front Control Panel



19D902264P3
Conventional Select Keypad

CONVENTIONAL M-PA PERSONALS

PRODUCE CODE PA

MAINTENANCE MANUALS

BAND	DESCRIPTION	MANUAL #
HB	136-174 MHz Select Radio 136-174 MHz Scan Radio 136-174 MHz System Radio	LBI-38378 LBI-38380 LBI-38381
UHF	403-470 MHz Select Radio 403-470 MHz Scan Radio 403-470 MHz System Radio	LBI-38379 LBI-38403 LBI-38404

REFER TO SECTION 13.2-PG 4 FOR ACCESSORIES AND PARTS

CONVENTIONAL MTL PERSONALS

PRODUCT CODE PA



PRODUCT PROGRAMMING

ORDERING NUMBER	DESCRIPTION
TQ3370	PC Programming Adapter Kit. Includes Serial Interface Unit, PC to Serial Interface Unit Cable, and Auxiliary Power Supply. (Replaces TQ3310 and provides Flash Programming Capability.)
TQ3311	PC Programming Cable (Interface Module to M-PA Personals)
TQ3339	PC Programming Software (5 1/4" Disk)
TQ4339	PC Programming Software (3 1/2" Disk)

CONVENTIONAL MTL PERSONALS

PRODUCT CODE PA

PRODUCT NOMENCLATURE

HIGH BAND

RADIO CONFIGURATION	FREQUENCY RANGE (MHz)	RF POWER	PACKAGE NUMBER	COMBINATION NUMBER
16 Channel Capacity Scan Model 5 PPM Stability	146-162 157-174	5W 5W	PAMTLJ PAMTLH	PAHCMX PAJCMX

UHF BAND

RADIO CONFIGURATION	FREQUENCY RANGE (MHz)	RF POWER	PACKAGE NUMBER	COMBINATION NUMBER
16 Channel Capacity Scan Model 2.5 PPM Stability	440-470	4W	PAMTLU	PAUCMX

COMPLETE BOARD ASSEMBLIES

HIGH BAND

PART NUMBER	BOARD DESCRIPTION	FREQUENCY RANGE (MHz)	RF POWER
19D903081G1	Control Board	—	—
19D902735G3	RF Board	146-162	6W
19D902735G5	RF Board	157-174	6W
19C337097G2	Rear Cover Assembly (incl. RF board)	146-162	6W
19C337097G3	Rear Cover Assembly (incl. RF board)	157-174	6W

CONVENTIONAL MTL PERSONALS

PRODUCT CODE PA

UHF BAND

PART NUMBER	BOARD DESCRIPTION	FREQUENCY RANGE (MHz)	RF POWER
19D903081G1	Control Board	440-512	—
19D902282G13	RF Board	440-470	5W
19C337097G13	Rear Cover Assembly (incl. RF board)	440-470	5W

RF POWER MODULES

BAND	PART NUMBER	CIRCUIT SYMBOL	CIRCUIT FUNCTION	SIMILAR TO
HB	19A705774P4	U4	146-174 MHz Power Amplifier	SHW1027
UHF	19A705419P2	U4	440-470 MHz Power Amplifier	MHW-707-2

FREQUENCY MODULES

BAND	PART NUMBER	CIRCUIT SYMBOL	DESCRIPTION	BOARD WHERE USED
HB	19A702511G35	Y1	4.0 MHz Crystal	Control Board 19D902349G5
	19A702511G27	Y1	8.000 MHz Crystal	Control Board 19D903081G1
	19A702511G61	Y2	2.000 MHz Crystal	Control Board 19D903081G1
	19A702511G26	Y3	11.059 MHz Crystal	Control Board 19D903081G1
	19A705376P5	Y1	45.455 MHz Crystal	RF Board
	19B801351P10	U3	Reference Oscillator	RF Board

CONVENTIONAL MTL PERSONALS

PRODUCT CODE PA

UHF	19A702511G35	Y1	4.0 MHz Crystal	Control Board 19D902349G5
	19A702511G27	Y1	8.000 MHz Crystal	Control Board 19D903081G1
	19A702511G61	Y2	2.000 MHz Crystal	Control Board 19D903081G1
	19A702511G26	Y3	11.059 MHz Crystal	Control Board 19D903081G1
	19A705376P5	Y1	45.455 MHz Crystal	RF Board
	19B801351P15	U3	Reference Oscillator	RF Board

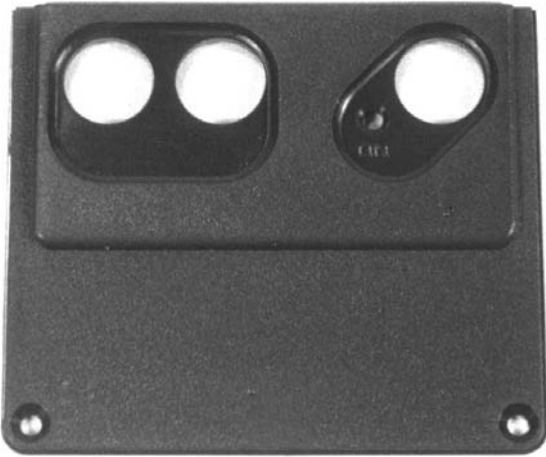
PROGRAMMABLE IC'S MICROPROCESSORS

BAND	PART NUMBER	CIRCUIT SYMBOL	DESCRIPTION	BOARD WHERE USED
HB, UHF	349A9567G1	U7	PROM Kit	Control Board 19D903081G1
	19A705963P2	U15	EEPROM (Flash)	Control Board 19D903081G1
	344A4600P101	U17	EEPROM	Control Board 19D903081G1
	19A705557P5	U18	Masked Microprocessor	Control Board 19D903081G1
HB, UHF	19A705949G10	U10	Microprocessor	Control Board 19D902349G5
	19A705950G10	U14	Microprocessor	Control Board 19D902349G5
	344A4600P101	U11	EEPROM	Control Board 19D902349G5

CONVENTIONAL MTL PERSONALS

PRODUCT CODE PA

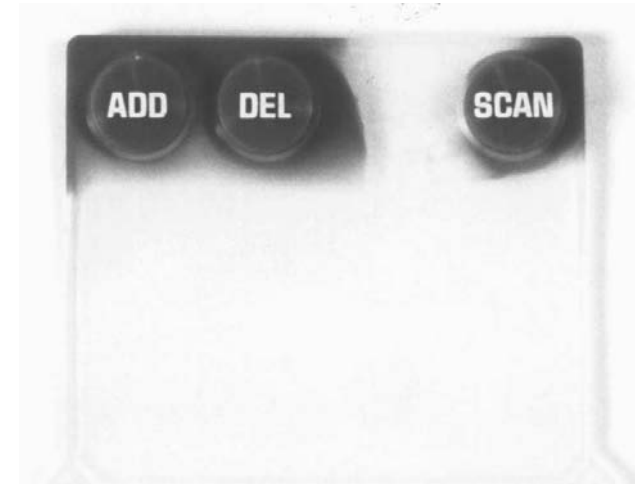
MISCELLANEOUS PARTS



19D902561P1
Front Control Panel



19D902513P2
Top Cover



19D902560P2
Front Keypad

MAINTENANCE MANUALS

BAND	DESCRIPTION	MANUAL #
HB	146-174 MHz Radio	LBI-38432
UHF	440-470 MHz Radio	LBI-38433

REFER TO SECTION 13.2-PG 4 FOR ACCESSORIES AND PARTS

AEGIS™ M-PA CONVENTIONAL PERSONALS

PRODUCT CODE PA



SCAN MODEL



SELECT MODEL



SYSTEM MODEL

PRODUCT PROGRAMMING

ORDERING NUMBER	DESCRIPTION
TQ3370	PC Programming Adapter Kit. Includes Serial Interface Unit, PC to Serial Interface Unit Cable, and Auxiliary Power Supply. (Replaces TQ3310 and provides Flash Programming Capability.)
TQ3311	PC Programming Cable (Interface Module to M-PA Personals)
TQ3339	PC Programming Software (5 1/4" Disk)
TQ4339	PC Programming Software (3 1/2" Disk)

AEGIS™ M-PA CONVENTIONAL PERSONALS

PRODUCT CODE PA

PRODUCT NOMENCLATURE

HIGH BAND CONVENTIONAL

RADIO CONFIGURATION		FREQUENCY RANGE (MHz)	RF POWER	PACKAGE NUMBER	COMBINATION NUMBER
No Encryption	SELECT Models	136-150.8	6W	PAGAC1	PAGASX
		146-162	6W	PAHAC1	PAHASX
		157-174	6W	PAJAC1	PAJASX
	SCAN Models	136-150.8	6W	PAGAC2	PAGADX
		146-162	6W	PAHAC2	PAHADX
		157-174	6W	PAJAC2	PAJADX
	SYSTEM Models	136-150.8	6W	PAGAC3	PAGAPX
		146-162	6W	PAHAC3	PAHAPX
		157-174	6W	PAJAC3	PAJAPX
DES Encryption	SELECT Models	136-150.8	6W	PAGACG	*
		146-162	6W	PAHACG	*
		157-174	6W	PAJACG	*
	SCAN Models	136-150.8	6W	PAGACH	*
		146-162	6W	PAHACH	*
		157-174	6W	PAJACH	*
	SYSTEM Models	136-150.8	6W	PAGACJ	*
		146-162	6W	PAHACJ	*
		157-174	6W	PAJACJ	*
VGE Encryption	SELECT Models	136-150.8	6W	PAGACK	*
		146-162	6W	PAHACK	*
		157-174	6W	PAJACK	*

*Combination Number not used for these model numbers.

AEGIS™ M-PA CONVENTIONAL PERSONALS

PRODUCT CODE PA

	SCAN Models	136-150.8	6W	PAGACL	*
		146-162	6W	PAHACL	*
		157-174	6W	PAJACL	*
	SYSTEM Models	136-150.8	6W	PAGACM	*
		146-162	6W	PAHACM	*
		157-174	6W	PAJACM	*

*Combination Number not used for these model numbers.

PRODUCT NOMENCLATURE

UHF BAND CONVENTIONAL

RADIO CONFIGURATION		FREQUENCY RANGE (MHz)	RF POWER	PACKAGE NUMBER	COMBINATION NUMBER
No Encryption	SELECT Models	403-440	5W	PAPAC1	PAPASX
		440-470	5W	PAUAC1	PAUASX
		470-494	5W	PAVAC1	PAVASX
		492-512	5W	PAXAC1	PAXASX
	SCAN Models	403-440	5W	PAPAC2	PAPADX
		440-470	5W	PAUAC2	PAUADX
		470-494	5W	PAVAC2	PAVADX
		492-512	5W	PAXAC2	PAXADX
	SYSTEM Models	403-440	5W	PAPAC3	PAPAPX
		440-470	5W	PAUAC3	PAUAPX
		470-494	5W	PAVAC3	PAVAPX
		492-512	5W	PAXAC3	PAXAPX

AEGIS™ M-PA CONVENTIONAL PERSONALS

PRODUCT CODE PA

DES Encryption	SELECT Models	403-440	5W	PAPACG	*
		440-470	5W	PAUACG	*
		470-494	5W	PAVACG	*
		492-512	5W	PAXACG	*
	SCAN Models	403-440	5W	PAPACH	*
		440-470	5W	PAUACH	*
		470-494	5W	PAVACH	*
		492-512	5W	PAXACH	*
	SYSTEM Models	403-440	5W	PAPACJ	*
		440-470	5W	PAUACJ	*
		470-494	5W	PAVACJ	*
		492-512	5W	PAXACJ	*
VGE Encryption	SELECT Models	403-440	5W	PAPACK	*
		440-470	5W	PAUACK	*
		470-494	5W	PAVACK	*
		492-512	5W	PAXACK	*
	SCAN Models	403-440	5W	PAPACL	*
		440-470	5W	PAUACL	*
		470-494	5W	PAVACL	*
		492-512	5W	PAXACL	*
	SYSTEM Models	403-440	5W	PAPACM	*
		440-470	5W	PAUACM	*
		470-494	5W	PAVACM	*
		492-512	5W	PAXACM	*

*Combination Number not used for these model numbers.

AEGIS™ M-PA CONVENTIONAL PERSONALS
PRODUCT CODE PA

COMPLETE BOARD ASSEMBLIES

HIGH BAND

PART NUMBER	BOARD DESCRIPTION	FREQUENCY RANGE (MHz)	RF POWER
19D903081G1	VG/AEGIS/EDACS Control Board	—	—
344A3659P3	AEGIS DES Board	—	—
344A3659P4	AEGIS Voice Guard/VGE Board	—	—
19D902735G1	RF Board	136-150.8	6W
19D902735G3	RF Board	146-162	6W
19D902735G5	RF Board	157-174	6W
19C337097G1	Rear Cover/RF Board Assembly	136-150.8	6W
19C337097G2	Rear Cover/RF Board Assembly	146-162	6W
19C337097G3	Rear Cover/RF Board Assembly	157-174	6W

UHF BAND

PART NUMBER	BOARD DESCRIPTION	FREQUENCY RANGE (MHz)	RF POWER
19D903081G1	VG/AEGIS/EDACS Control Board	—	—
344A3659P3	AEGIS DES Board	—	—
344A3659P4	AEGIS Voice Guard/VGE Board	—	—
19D902282G1	RF Board	403-440	5W
19D902282G6	RF Board	440-470	5W
19D902282G3	RF Board	470-492	5W
19D902282G8	RF Board	492-512	5W
19C337097G4	Rear Cover/RF Assembly	403-440	5W
19C337097G5	Rear Cover/RF Assembly	440-470	5W
19C337097G6	Rear Cover/RF Assembly	470-492	5W
19C337097G7	Rear Cover/RF Assembly	492-512	5W

AEGIS™ M-PA CONVENTIONAL PERSONALS

PRODUCT CODE PA

RF POWER MODULES

BAND	PART NUMBER	CIRCUIT SYMBOL	CIRCUIT FUNCTION	SIMILAR TO
HB	19A705774P3	U4	136-150.8 MHz Power Amplifier	SHW1026
	19A705774P4	U4	146-174 MHz Power Amplifier	SHW1027
UHF	19A705419P1	U4	403-440 MHz Power Amplifier	MHW-707-1
	19A705419P2	U4	440-470 MHz Power Amplifier	MHW-707-2
	19A705419P3	U4	470-494 MHz Power Amplifier	MHW-707-3
	19A705419P4	U4	492-512 MHz Power Amplifier	MHW-707-4

FREQUENCY MODULES

BAND	PART NUMBER	CIRCUIT SYMBOL	DESCRIPTION	BOARD WHERE USED
HB, UHF	19A702511G27	Y1	8.000 MHz Crystal	Control Board
	19A702511G61	Y2	2.000 MHz Crystal	Control Board
	19A702511G26	Y3	11.0592 MHz Crystal	Control Board
	19A705376P5	Y1	45.455 MHz Crystal	RF Board
	19B801351P15	U3	Reference Oscillator	RF Board

PROGRAMMABLE IC'S/MICROPROCESSORS

BAND	PART NUMBER	CIRCUIT SYMBOL	DESCRIPTION	BOARD WHERE USED
All	349A9567G1	U7	PROM Kit	Control Board
All	19A705963P2	U15	EPROM (Flash)"	Control Board
All	344A4600P101	U17	EEPROM"	Control Board
All	19A705557P5	U18	Masked Microprocessor	Control Board

" Shipped without software.

AEGIS™ M-PA CONVENTIONAL PERSONALS

PRODUCT CODE PA

MAINTENANCE MANUALS

BAND	DESCRIPTION	MANUAL #
HB	AEGIS Conventional Radio	LBI-38824
UHF	AEGIS Conventional Radio	LBI-38825
All	19D903081G1 VG/AEGIS/EDACS Control Board	LBI-38828
All	344A3659P3 AEGIS DES Board	LBI-38829
All	344A3659P4 AEGIS Voice Guard/VGE Board	LBI-38830
All	SPK9010 and SPK9011 Test Accessory Kits	LBI-38518

REFER TO SECTION 13.2-PG 4 FOR ACCESSORIES AND PARTS