M-PA PART NUMBERS vs. FLASHCODE REVISON:

You can check the group level and Flash Code type by pressing and holding the **BLUE** monitor button while you power up the radio. The display will flash between "**GROUP** xx" and "**I**yyzz**M0**a".

Where: **xx** = Group level
yy = Flash type
zz = Flash revision level
a = Microprocessor revision level.

 Use "Table 1 & 2" below to determine Flash Code part number for your particular MPA. (These Flash Code part numbers are for 19D903*081* controller boards only - **Table 1** is for CONVENTIONAL, **Table 2** is for EDACS). **Table 3** is use for 19D902*628*G1 NON-Digital controller boards (EDACS ONLY). **Table 4** describes Microprocessor revision level in relation to board type and board revision level . The Micro Rev level can help you determine what part number logic board you have and also what "Rev" level it is!

DESCRIPTION (conventional)	PART NUMBER	SHIP DATE	VOICE GUARD BOARD	FLASH TYPE	FLASH CODE FILE NAME
No VG or AEGIS	349A9541Gxx	after 93 32 1	none	**20**	VER_**20zz**.BPD
VG **DES**	344A3724Gxx	before 92 33 5	344A3659P**1**	**60**	VER_**60zz**.BPD
AEGIS/VG **DES**	344A4423Gxx	after 92 34 1	344A3659P**3**	**62 or 80**	VER_**80zz**.BPD
VG **VGE**	344A3726Gxx	before 92 34 5	344A3659P**2**	**65**	VER_**65zz**.BPD
AEGIS/VG **VGE**	344A4425Gxx	after 92 35 1	344A3659P**4**	**67 or 85**	VER_**85zz**.BPD
UnEncrypted AEGIS	344A4417Gxx	after 93 33 1	344A3659P**4**	**40**	VER_**40zz**.BPD

TABLE 1
(Conventional Radios)

DESCRIPTION (EDACS)	PART NUMBER	SHIP DATE	VOICE GUARD BOARD	FLASH TYPE	FLASH CODE FILE NAME
No VG or AEGIS	344A4614Gxx	after 93 10 1	none	10	VER_**10zz**.BPD
VG **DES**	344A3703Gxx	before 92 33 5	344A3659P**1**	50	VER_**50zz**.BPD
AEGIS/VG **DES**	344A4419Gxx	after 92 34 1	344A3659P**3**	52 or 70	VER_**70zz**.BPD
VG **VGE**	344A3705Gxx	before 92 34 5	344A3659P**2**	55	VER_**55zz**.BPD
AEGIS/VG **VGE**	344A4421Gxx	after 92 35 1	344A3659P**4**	57 or 75	VER_**75zz**.BPD
UnEncrypted AEGIS	344A4415Gxx	after 93 33 1	344A3659P**4**	30	VER_**30zz**.BPD

TABLE 2
(EDACS Radios)

* xx = "Group Level" - (Conventional Group 11 is current as of 12/1/94)
                             (EDACS Group 15 is current as of 12/1/94)
* zz = "Flash Revision Level" - (Look at Table3 for "Flash Type vs. Group Level")

* Flash types 52, 57, 62, or 67 have been replaced by AEGIS/VG flash types 70, 75, 80, 85 respectively. Flash types 52,57,62, and 67 are are no longer supported and are not available. The part numbers listed above in Table1 and Table2 are for the replacement flash types 70, 75, 80, and 85. They are a direct replacement.

DESCRIPTION (EDACS non-digital)	PART NUMBER	SHIP DATE	VOICE GUARD BOARD	FLASH TYPE	FLASH CODE FILE NAME
Non Digital Controller	19A149863Gxx	before 93 10 1	N/A	90	VER_**90zz**.BPD

TABLE 3
(896-941 MHz Radios)

TABLE 3 indicates that the 19D902628G1 VHF,UHF, and 800 MHZ non-digital controller board only requires one flash code. The **628** controller board was used for EDACS but did not contain a location for the VG/AEGIS board (Valtronics board). The **Flash ID** is **90** (Ex. **I**90xxm06). The **Ship Date** is before **93 10 1**. The part number for the flash code is **19A149863Gxx -** where xx = group level (presently group 15)

Microprocessor revision	Controller Board Type
M03	19D903*081*G1
M05	19D903*081*G1
M06	19D903*081*G1
M10	19D902*628*G3
M12	19D902*628*G3

TABLE 4

Group Level (xx)

GRP LVL	FLASH TYPE (Conventional)								FLASH TYPE (EDACS)								
	20	40	60	62	65	67	80	85	10	30	50	52	55	57	70	75	90
1	-	01	44	62	39	62	06	04	-	01	26	62	21	62	06	04	01
2	-	-	53	-	53	-	-	-	-	-	28	-	23	-	-	-	-
3	-	-	56	-	57	-	-	-	-	-	30	-	25	-	-	-	-
4	-	19	71	-	71	-	23	23	-	-	36	-	31	-	-	-	-
5	-	-	-	-	72	72	-	24	-	-	37	-	32	-	-	-	-
6	-	23	-	-	75	75	-	27	-	-	56	-	57	-	-	-	05
7	-	-	-	-	-	-	-	-	-	-	-	-	71	71	-	23	-
8	28	28	78	-	78	-	28	28	22	22	74	74	74	74	26	26	22
9	34	34	84	-	84	-	34	34	-	23	-	-	75	75	-	27	-
10	45	45	95	-	95	-	45	45	28	28	78	-	78	-	28	28	28
11	50	50	9A	-	9A	-	50	50	34	34	84	-	88	-	34	34	34
12									45	45	95	-	95	-	45	45	45
13									50	50	9A	-	9A	-	50	50	50
14									51	51	9B	-	9B	-	51	51	51
15									53	53	9D	-	9D	-	53	53	53
16									64	64	9E	-	9E	-	64	64	64
17	68	68	68	-	68	-	68	68	68	68	A8	-	9E	-	68	68	68
18	-	-	AA	-	-	-	-	-	79	-	AA	-	-	-	-	-	-
19	7e	7e	be	-	be	-	7e	7e	7e	7e	be	-	be	-	7e	7e	7e

TABLE 4

Table 4 - You can determine Group level (xx) if you have the "Flash Revison Level (zz)" and the "Flash Type (yy)"
[i.e.   **I**2045 or **Ver**_2045.**BPD** is Group 10 conventional flash code]

The following tables and procedures show how to determine flash code type on a MPA that has corrupted flashcode.

There are three items you need to have. They are the COMB#/PKG# or MODL#, the DATE code, and the two letter VG/AEGIS identifier. These items are all located on the MPA's Label on the back of the radio.

```
ERICSSON/GE
COMB# PA____            YY

SER#1234567      AABBC
DOC:
```
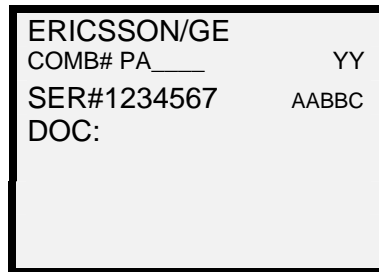
MPA label

The SHIP DATE code is the AABBC on the above label. AA = year it was made, BB = production week, and C = day of the week.

The "Two-letter VG/AEGIS" identifier is YY on the above label. YY could be any of the following:

VG = VG DES encryption	(Voice Guard DES ONLY)
VV = VG VGE encryption	(Voice Guard VGE ONLY)
VS = AEGIS/VG DES encryption	(AEGIS or Voice Guard DES)
VE = AEGIS/VG VGE encryption	(AEGIS or Voice Guard VGE)
VA = AEGIS "Unencrypted"	(AEGIS ONLY)

The COMB#, PKG#, or MODEL# is located on the next line after the EGE Logo. **The MODL# is the same as a PKG#.**

After you have compiled this information, use the below formula/Tables to determine flash code type. (This chart will be VALID as long as the original controller board has not been change)

HARDWARE VS. SOFTWARE COMPATIBILITY MATRIX FOR 19D903*081*G1 BOARD

4TH LETTER OF:		5TH LETTER OF:		344A3659P? VG BOARD (Two-letter VG/AEGIS identifier)					
PKG#	COMB#	PKG#	COMB#	NONE	VV	VG	VS	VE	VA
'0'	'C'	not required	not required	20	65(P2) or 67/85(P4)	60(P1) or 62/80(P3)	N/A*	N/A	N/A
'T' or 'S'	'T'	not required	not required	10	55(P2) or 57/75(P4)	50(P1) or 52/70(P3)	N/A	N/A	N/A
'A'	'A'	'C'	'S'	40	N/A	N/A	80(P3)	85(P4)	40
'A'	'E'	'T'	'S' or'F'	30	N/A	N/A	70(P3)	75(P4)	30

TABLE 5

* N/A - Not Applicable

Table 5 - You can determine "Flash Type" if you have the Comb#, Pkg#, Modl# and Two letter VG/AEGIS identifier
[i.e. - {PAPST5 and VV} = Flash type (55)... if it has a (P2) Valtronics board or Flash type (57 or 75) if it has a (P4) Valtronics board]

NOTE: The **dark** area contains the "**Flash Type**". The "**P1 - P4**" in the **dark** area indicates VG or AEGIS/VG 344A3659 "Valtronics" board type. Use the tables at the beginning of this document to determine part numbers from "Flash Types" and "VG/AEGIS" board types.

LASTLY the 900mhz and Conventional only controller boards:

The 19D902628G3 900 MHZ non-digital controller board requires a special 900 MHZ flash code. The part number is 19A149918Gxx - where xx = group level (presently group 9)

The 19D902349G9 conventional only controller board is a non-flashable board. It is hard-coded.