

Technical Services Memo

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Product Code: 67 B3 S3
Subject Code: RF TX
Part Number: 19A134171P2
19D423006
19D424895
LBI: 30201

CATEGORY: Stations

SUBJECT: MASTR-II UHF PA Transistor Substitution

PROBLEM:

RF power transistor 19A134171P2, (similar to SGS-Thompson SD1488-07) used on MASTR-II UHF (450-470 MHz) power amplifiers, is no longer available.

SOLUTION:

Use Motorola MRF646 transistors, after modification of the circuit.

Capacitors on the base and collector leads of each stage need to be increased in value.

C4205L, C4206L, C4215L, C4216L, C4225L, C4226L, C4235L, and C4236L need to be changed from 35 pf to 37pf (**19A700131P37**).

C4209L, C4210L, C4219L, C4220L, C4229L, C4230L, C4239L, and C4240L need to be changed from 37pf to 41 pf (**19A700131P41**).

All four output transistors must be of the same MRF646 type.

It is suggested that the PA assembly/board be marked that it has been modified for the use of MRF transistors, i.e. 19D423006G6 Rev. **MRF**

A Service Parts Kit is available.

SPK9633 will contain:

| | | |
|-----------------|---------------------------|---|
| 19A700131P37 | Capacitor | 8 |
| 19A700131P41 | Capacitor | 8 |
| MRF646 | Transistor | 4 |
| 19D423006G6 DWG | Marked up layout | 1 |
| MRF MOD SHEET | Modification instructions | 1 |