

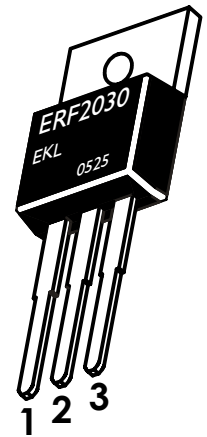
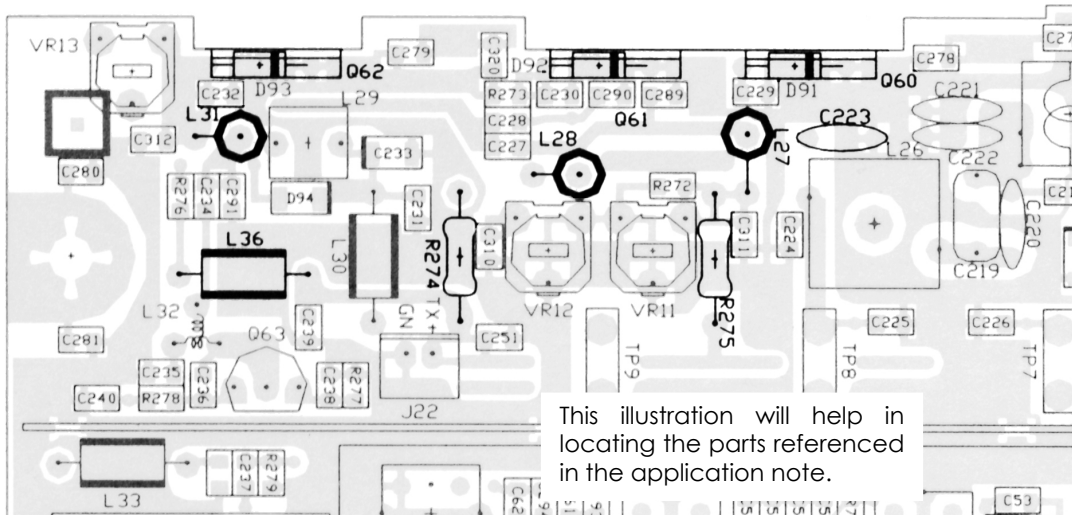
This application note describes how to substitute ERF-2030s for the discontinued Mitsubishi 2SC2166 and 2SC1969 RF transistors in the RCI-6900F25 and RCI-2950 DX 10 meter transceivers.

The supplying of this information in no way holds EKL Components, or any of its members, responsible or liable for any damage incurred to person or property. This application note, or any other information, provided by EKL Components is to be used at YOUR OWN RISK.

Required Parts:

- 3pc ERF-2030
- 1pc EN-369DR
- 2pcs EN-369FN
- 1pc 470K ohm, 1/4 Watt Resistor
- 2pcs 33K ohm, 1/4 Watt Resistor

- 1) Remove Q60, Q61 and Q62.
- 2) Remove L27, L28 and L31.
- 3) Remove C223.
- 4) Install the three ERF-2030's at Q60, Q61 and Q62. Install the ERF-2030's exactly the same way the 2SC2166 and 2SC1969's were installed, using all the SAME HARDWARE.
- 5) Install the EN-369DR at Q62. Install this part on the solder side of the PCB. **IMPORTANT:** Do NOT stress the leads of the EN-369DR by bending them too aggressively. Bend the leads carefully and make sure that they are as short as possible.
 - a) Solder the EN-369DR positive lead (marked +) to the gate pin of the ERF-2030 at Q62.
 - b) Solder the EN-369DR negative lead (unmarked) to the source pin of the ERF-2030 at Q62.
- 6) Install the EN-369FN's at Q60 and Q61. Install these parts on the solder side of the PCB. **IMPORTANT:** Do NOT stress the leads of the EN-369FN's by bending them too aggressively. Bend the leads carefully and make sure that they are as short as possible.
 - a) Solder the EN-369FN's positive lead (marked +) to the gate pin of the ERF-2030's at Q60 and Q61.
 - b) Solder the EN-369FN's negative lead (unmarked) to the source pin of the ERF-2030's at Q60 and Q61.
- 7) Install the 470K ohm resistor from the gate pin of the ERF-2030 at Q62, to the jumper wire located at L36.
- 8) Install a 33K ohm resistor from the gate pin of the ERF-2030 at Q60, to the hole at R275 that is closest to the front of the radio.
- 9) Install a 33K ohm resistor from the gate pin of the ERF-2030 at Q61, to the hole at R274 that is closest to the front of the radio.



ERF-2030 Pins:
1. Gate
2. Drain
3. Source

EKL Components' application notes are for reference and experimental use only. EKL Components claims no responsibility for the accuracy of this information and is not responsible for any damages that may occur from the use or misuse of this information.

By referencing and/or using this application note, or any other information, provided by EKL Components, the user agrees to NOT hold liable EKL Components, its subsidiaries, or any of its members, for any damages to person or property that may occur from the use or misuse of this information. This application note, or any other information, provided by EKL Components is to be used at YOUR OWN RISK.

If you do not agree to the above terms, please return the parts and information to the place of purchase.