



**becker**  
autoradio

Gerätetechnik

B/01.C-1e

**Troubleshooting Hints  
on  
Signal Seeking Radios**

Sheet 1

Valid for:	from N <sup>o</sup>
Mexico	918 062
Brescia	99 405
Le Mans	800 618

Following troubleshooting hints are for automatic tuning only. Make sure that radio is working normally by manual tuning.

- 1) Connect radio at battery and switch on. Adjust battery voltage at 6 - 6,5 Volts respectively 12 - 13 Volts. Disconnect antenna.

Complaint:	Cause:
a) Tuner will not operate when key is depressed, (Relay arm does not clear paddle wheel).	Key switch defect. (Tuner must start when point 1 - 2 of Adapter socket connected, Remote control). Open relay circuit, Resistor defective. (Mexico: R 120/125 or P2, Brescia/Le Mans: R 68/73 or P1).
b) Tuner operates only when key is depressed.	Tube ECC 85 defect. (Mexico: Roe, 7, Brescia/Le Mans: Roe, 5) Check voltages and currents of trigger circuit and adjust if necessary. Relay contacts defect, Undesired feed-back.
c) Tuner stops at high end of dial, (Fails to return)	Tuner return switch does not operate. Open solenoid circuit.
d) Tuner stops after return to low end of dial.	Low plate voltage. Check voltages and currents of trigger circuit and adjust if necessary. If tuner stops only on position max. sensitivity: Undesired feed-back. Mexico: Condenser C 35 defective)
e) Tuner sweeps to slow or stops at middle part of dial.	Power spring 1 or 2 broken, Jammed gear train, armature, tuning cores or levers.
f) Tuner stops at low end of dial and will not operate by manual tuning.	Tuner return switch does not operate. (Does not disconnect solenoid)
g) Tuner "machine guns"	Clutch in gear train defective.
h) Tuner returns slowly to low end of dial.	Clutch in gear train defective.

2) Connect antenna.

Wave band switch on position AM (MW).

Turn volume control to maximum.

Depress key and start tuner searching.

If tuner stops at station points normally received in the area go to step 3 respectively 4.

Complaint:	Cause:
a) Tuner stops at station points but no audio will be heard or signal is weak and distorted.	Audio contacts on trigger relay not operating.
b) Tuner fails to stop although strong signals can be tuned by manual tuning.	Sensitivity control defect. Check voltages and currents of trigger circuit and adjust if necessary. Tube defect. (Mexico: Roe. 7, Brescia/Le Mans: Roe. 4) Coupling condenser defective. (Mexico: C 120, Brescia/Le Mans: C 64)
c) Tuner stops on side band of all stations.	Clutch in gear train defective. Check alignment.
d) Tuner stops on side band of strong stations. Weak stations are tuned exactly.	Coupling condenser defective. (Mexico: C 121, Brescia/Le Mans: C 57) Check diode voltage. (Counter voltage)
e) Tuner stops at same stations on all positions of sensitivity control.	Short circuit in sensitivity control.

3) Wave band switch on position FM (Mexico only).

Depress key and start tuner searching.

Complaint:	Cause:
a) Tuner fails to stop although strong signals can be tuned in by manual tuning.	Circuit U9 in F5 detuned or short. Coupling condenser C 126 defective or shifted.
b) Tuner stops on side band of stations.	Clutch in gear train defective. Check alignment.

4) Wave band switch on position Long Wave. (Le Mans only)

Depress key and start tuner searching.

Complaint:	Cause:
a) Tuner stops on side band of stations.	Condenser C 20 defective. Clutch in gear train defective.

5) If no fault located check antenna and installation in car.

a) If impedance of antenna is too low, 1st rf stage of radio will be loaded and AM sensitivity is poor.

b) Improper installation can be cause for complaints. Make sure that sensitivity control and tone control has enough play.