



FILE
1982

Issue No. CTV 15

Television Service Data GENERAL INFORMATION

CONTAINS ADDITIONAL SERVICE DATA
INFORMATION.

Unitized Chassis

This publication contains General Information. File
at the front of the appropriate Service Data binder.

RCA Corporation
Consumer Electronics

Technical Publications

P.O. Box 1976 Indianapolis, Indiana 46206

Date: February 24, 1984

Subject: Tuning System Isolation Techniques

The Frequency Synthesis (FS) tuning system utilized in RCA color television product over the past several years consists of: 1) a tuner module (MST); 2) a control module (MSC); and, if the television is remote controlled, 3) a remote module (MCR). The intent of the Flow Chart in this Goldenrod is to assist the technician in quickly determining which module is defective when a failure occurs.

At first glance the Flow Chart may seem rather complex, but notice there are at least **ten (10) separate symptoms** addressed on this single chart. A simple, logical step-by-step procedure for each symptom will lead the technician to the cause. **To use the Flow Chart:**

Preliminary: Make sure the technician has the correct modules for the model being serviced. Check the Service Data for that model or consult the "Cross Reference TV Modules to RCA Chassis—Vol. II" published by RCA Distributor and Special Products Division (Form IF6870 Rev. 9/83). Also, Service Data will be helpful for locating connections and test points mentioned in the Flow Chart.

- Check antenna connections and the Cable/Normal switch.
- Turn the receiver on—note a portion of the Flow Chart is devoted to remote On/Off problems.
- Check receiver operation and determine which of the symptom headings listed on the Flow Chart most nearly describes receiver operation.
- Follow that section of the Flow Chart to isolate the defect.
- Substitute the suspected module to confirm the analysis. If normal operation is not restored, reinstall the original module and continue troubleshooting procedures.

Don't overlook chassis problems that cause tuner system-type symptoms, such as:

- A leaky IF link cable causes symptoms similar to a defective tuner.
- Loss of the -60V p-p horizontal pulse to the MSC module results in symptoms similar to a defective control module.

Product Safety Information

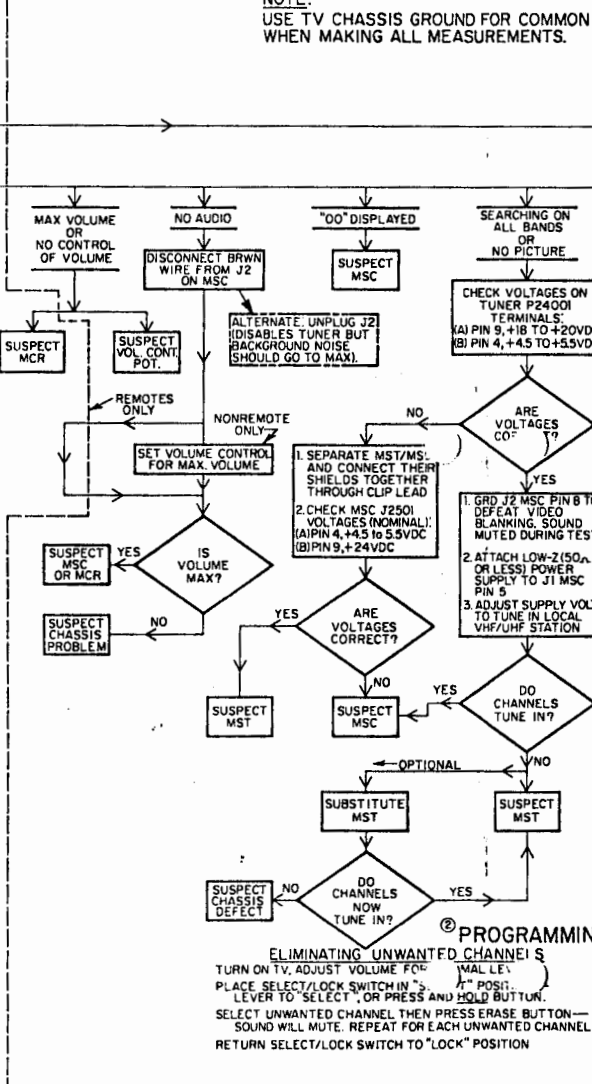
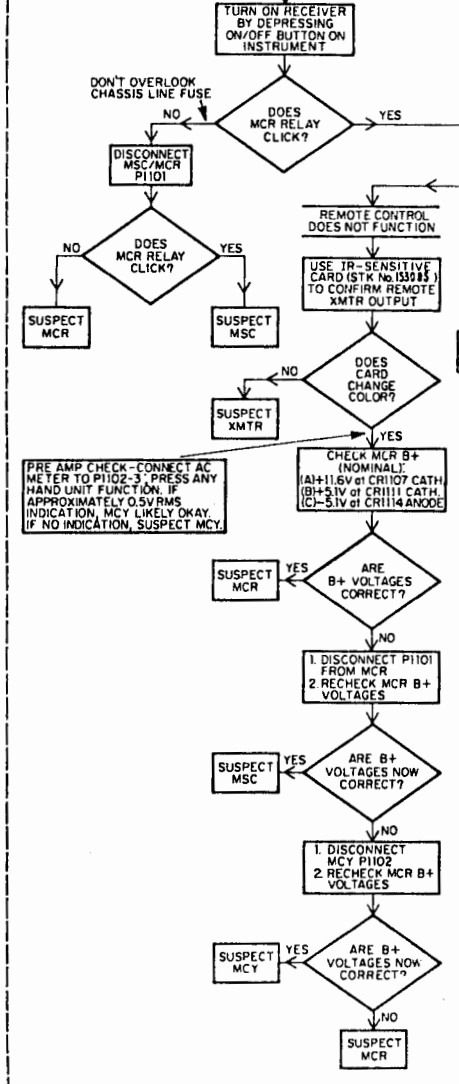
Product safety information is contained in the appropriate RCA Service Data covering specific chassis referenced in this bulletin. Specified Product Safety requirements and testing shall be complied with prior to returning equipment to the customer. Service personnel who neglect safety features or fail to perform safety checks may be liable for any resulting damages.

TUNING SYSTEM TROUBLESHOOTING GUIDE

1. CONFIRM CORRECT ANTENNA CONNECTIONS
2. CONFIRM CORRECT CABLE/NORMAL (C/N) SWITCH SETTING (1)

NOTE:
USE TV CHASSIS GROUND FOR COMMON WHEN MAKING ALL MEASUREMENTS.

REMOTE INSTRUMENTS ONLY
MCR 016/020



① CABLE/NORMAL SWITCH POSITION

CHANNELS	NORMAL	CABLE
2-6 (A-5I)-C	X	X
0-13 J-(W+17)	X	X
14-83	X	

② PROGRAMMING INSTRUCTIONS

ELIMINATING UNWANTED CHANNELS
TURN ON TV. ADJUST VOLUME FOR NORMAL LEVEL.
PLACE SELECT/LOCK SWITCH IN "SELECT" POSITION.
LEVER TO "SELECT", OR PRESS AND HOLD BUTTON.
SELECT UNWANTED CHANNEL THEN PRESS ERASE BUTTON—SOUND WILL MUTE. REPEAT FOR EACH UNWANTED CHANNEL.
RETURN SELECT/LOCK SWITCH TO "LOCK" POSITION.

ADDING DESIRED CHANNELS
TURN ON TV. ADJUST VOLUME FOR NORMAL LEVEL.
PLACE SELECT/LOCK SWITCH IN "SELECT" POSITION.
LEVER TO "SELECT", OR PRESS AND HOLD BUTTON.
SELECT DESIRED CHANNEL THEN PRESS ADD BUTTON—SOUND WILL UNMUTE. REPEAT FOR EACH DESIRED CHANNEL.
RETURN SELECT/LOCK SWITCH TO "LOCK" POSITION.