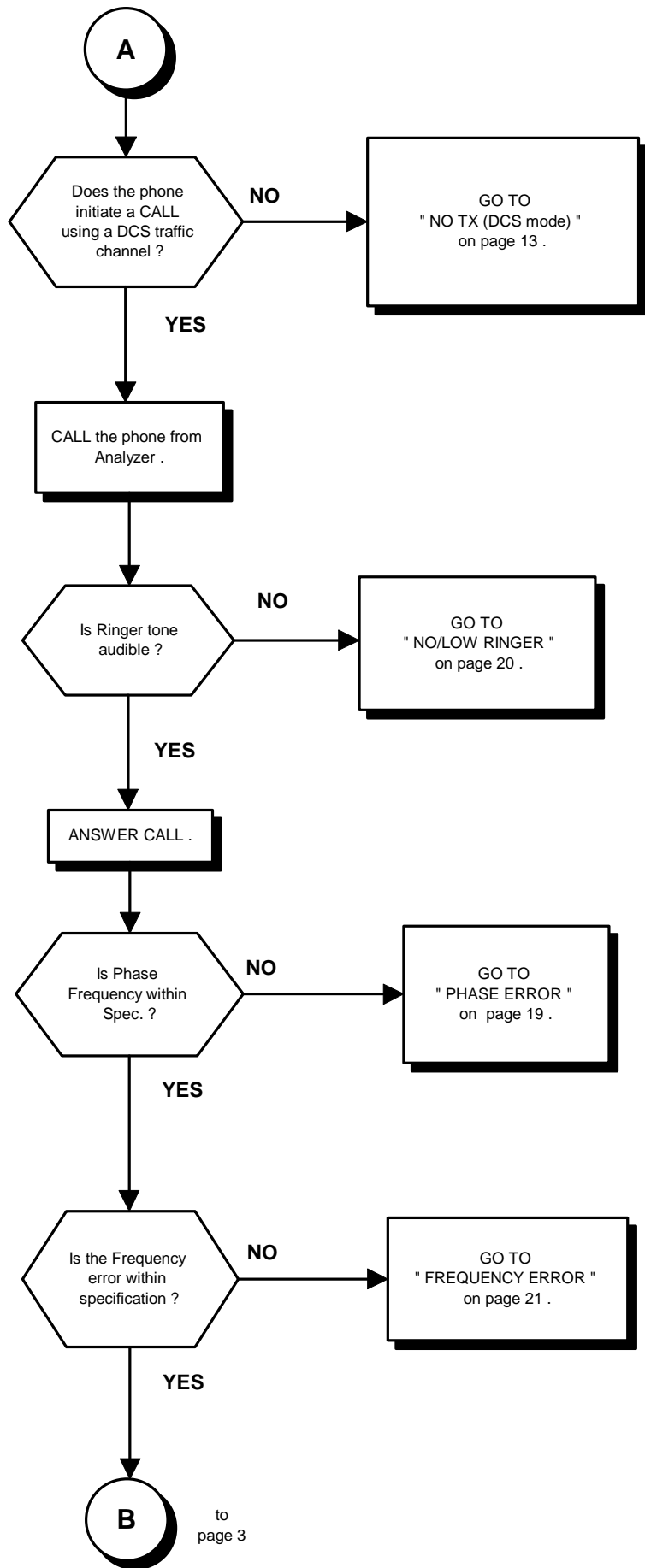


**ZAP
TEST
SEQUENCE**

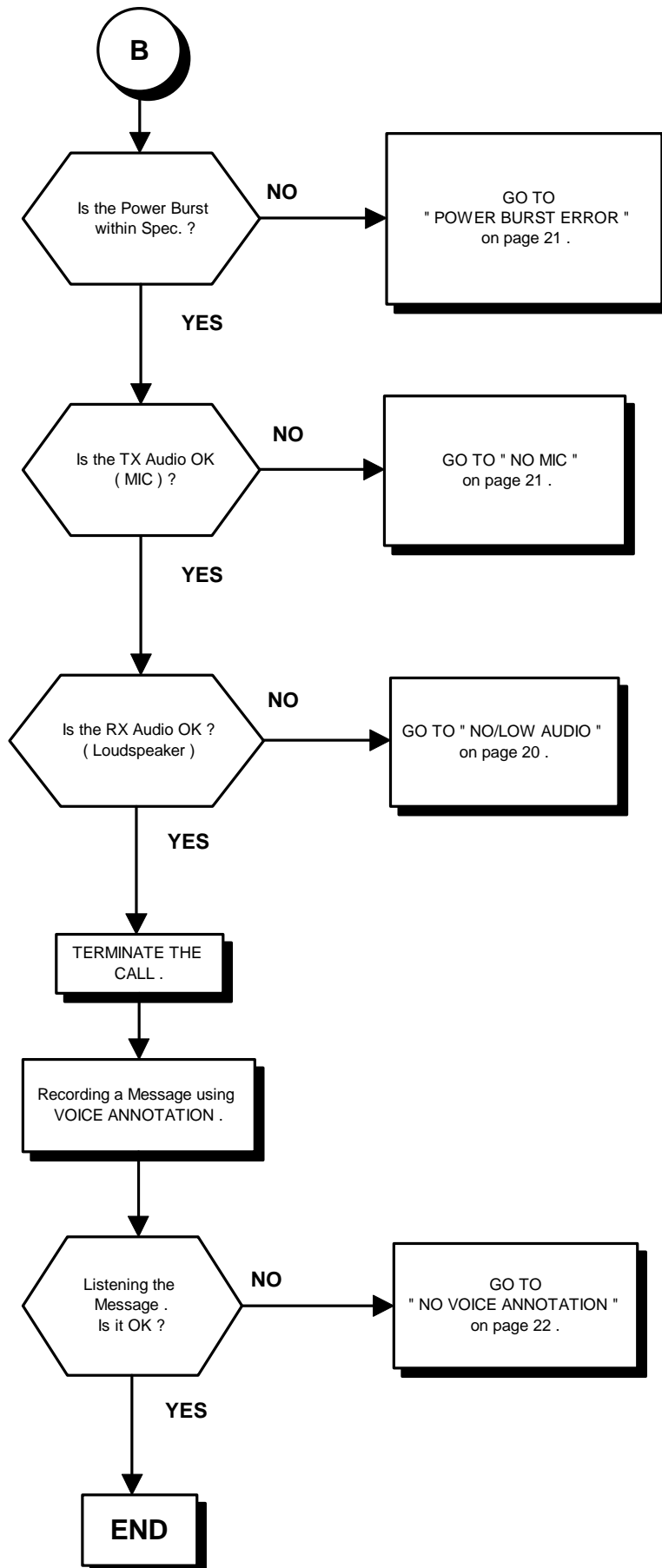


**ZAP
TEST
SEQUENCE**





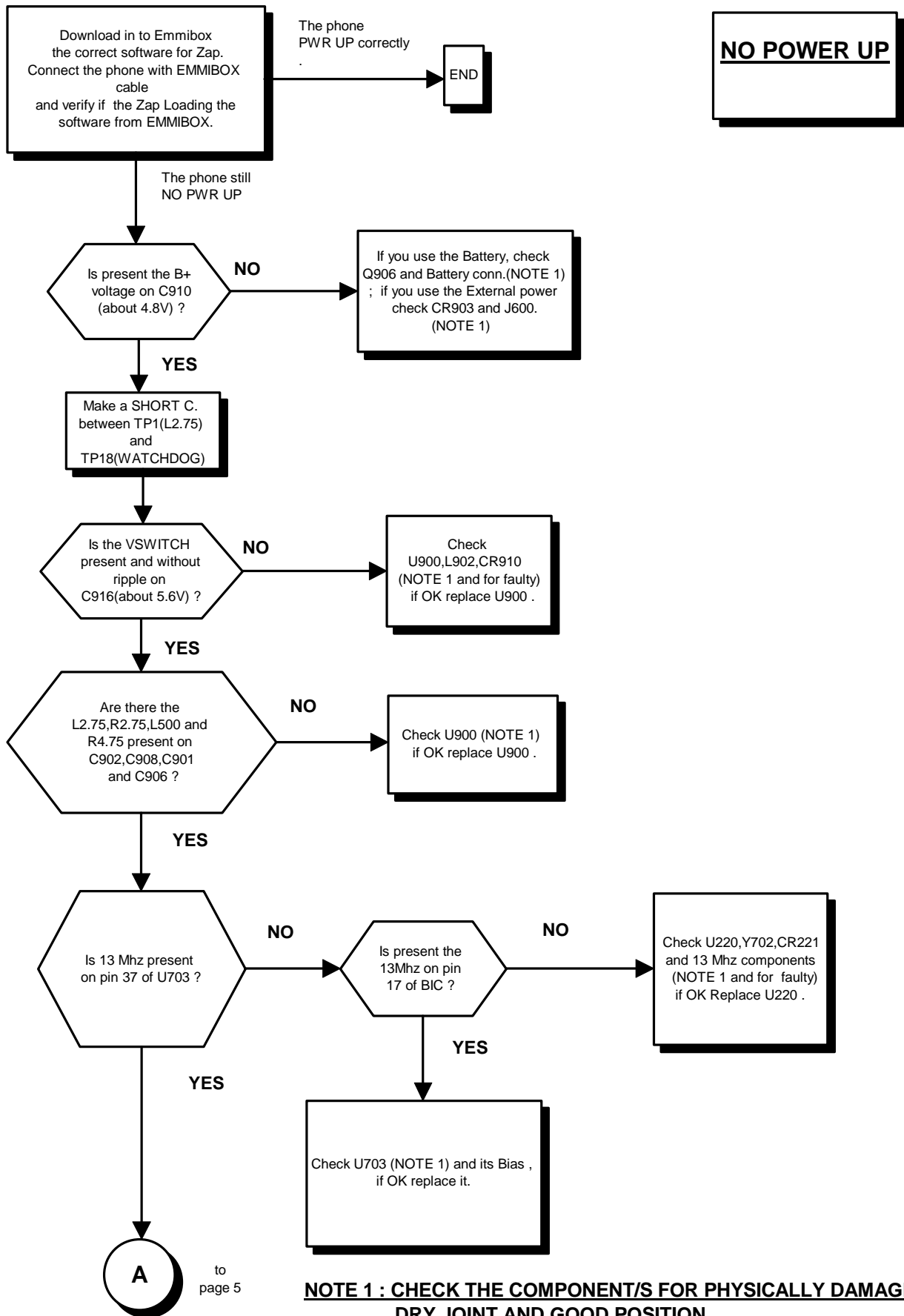
**ZAP
TEST
SEQUENCE**





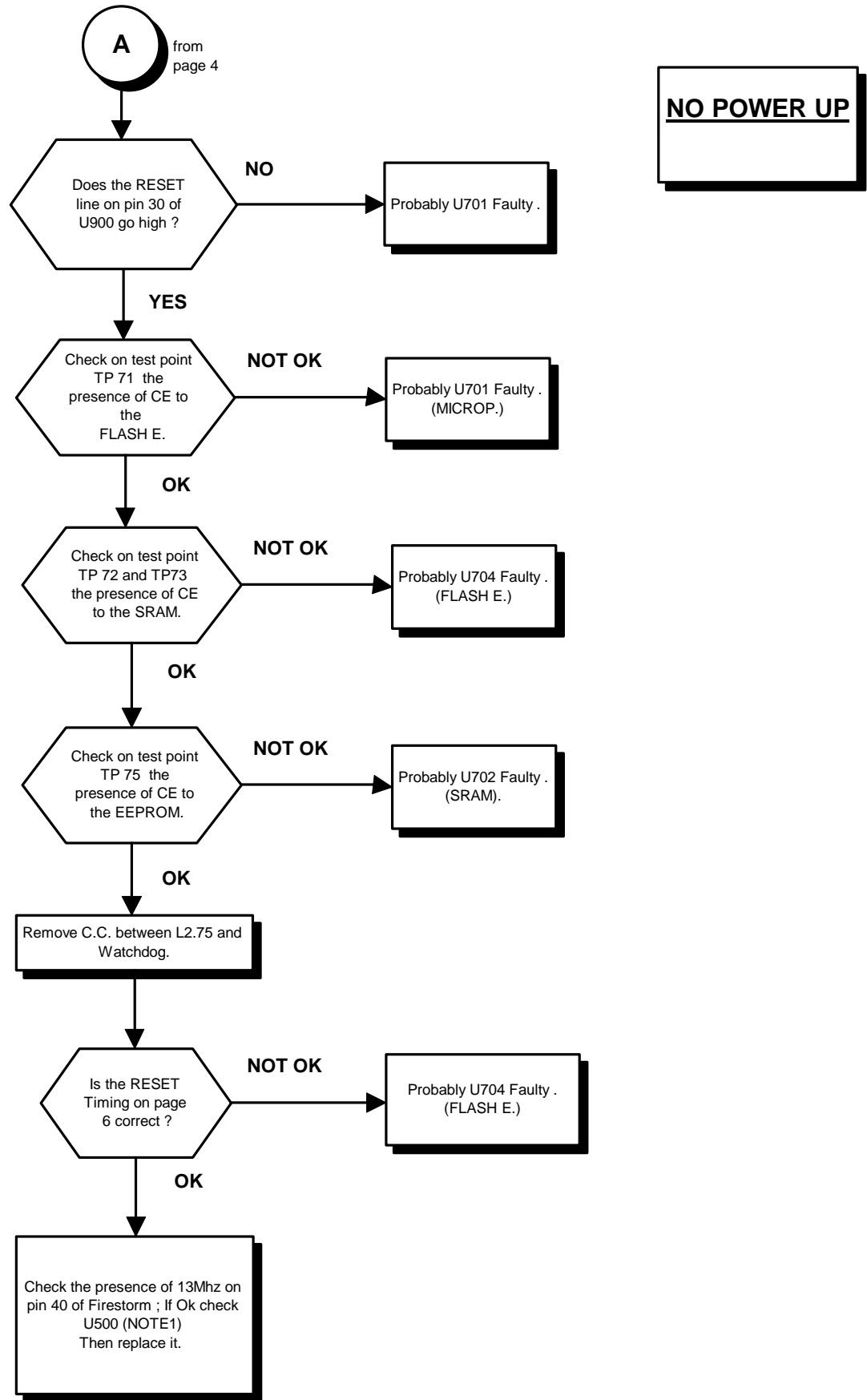
MOTOROLA GSM/DCS ZAP - Level 3 Procedure

START



A to page 5

NOTE 1 : CHECK THE COMPONENT/S FOR PHYSICALLY DAMAGE DRY JOINT AND GOOD POSITION .

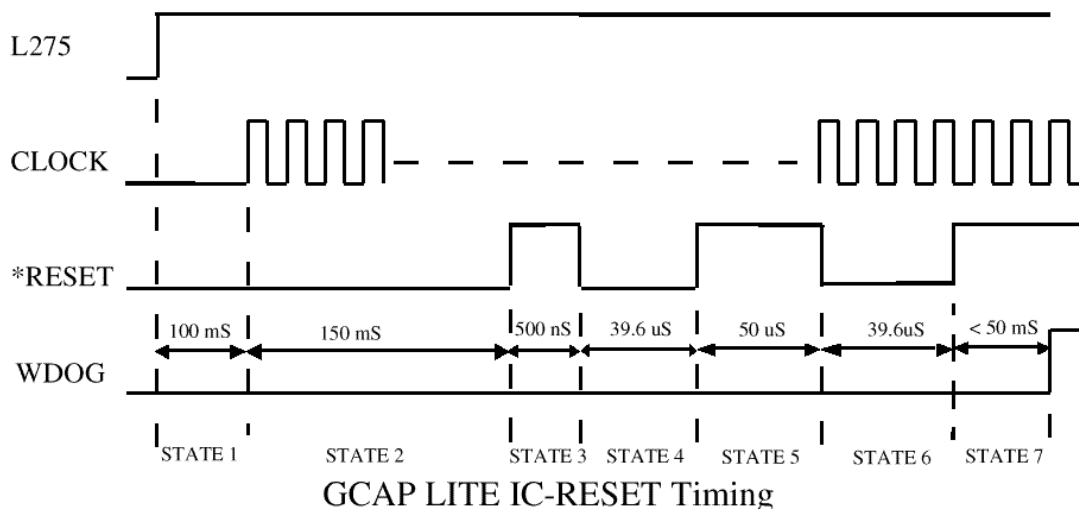


NOTE 1 : CHECK THE COMPONENT/S FOR PHYSICALLY DAMAGE DRY JOINT AND GOOD POSITION .



RESET SEQUENCE AT POWER ON

The power up RESET sequence is described in the following diagram. Following the activation of the +2.75V Regulator, the GCAP LITE IC and the 68338 begin a seven state power sequence involving the *RESET line and the GCAP Lite's Watchdog input. The figure below depicts the sequence of the states. The figure is not drawn to scale.



State 1

When the GCAP LITE IC detects a power on request (ON/OFF Line "LOW"), the GCAP LITE will drive the system *RESET line low. The 68338 Clock line will take approximately 100mS to stabilize after power is applied.

State 2

The 68338, SMOc, and BIC in the radio are connected to the *RESET line. The nominal time *RESET is held low by the GCAP LITE is 250 milliseconds +/- 50 ms.

State 3

When the GCAP LITE releases *RESET, it is pulled high by an internal resistor. There is a period of approximately 500 nanoseconds when neither the GCAP LITE or 68338 is asserting *RESET.

State 4

When the 68338 reset control logic detects that the system *RESET line is no longer being driven, it drives it low for an additional 512 cycles (39.6 microseconds). This assertion of *RESET by the 68338 is a feature of the IC and cannot be modified.

State 5

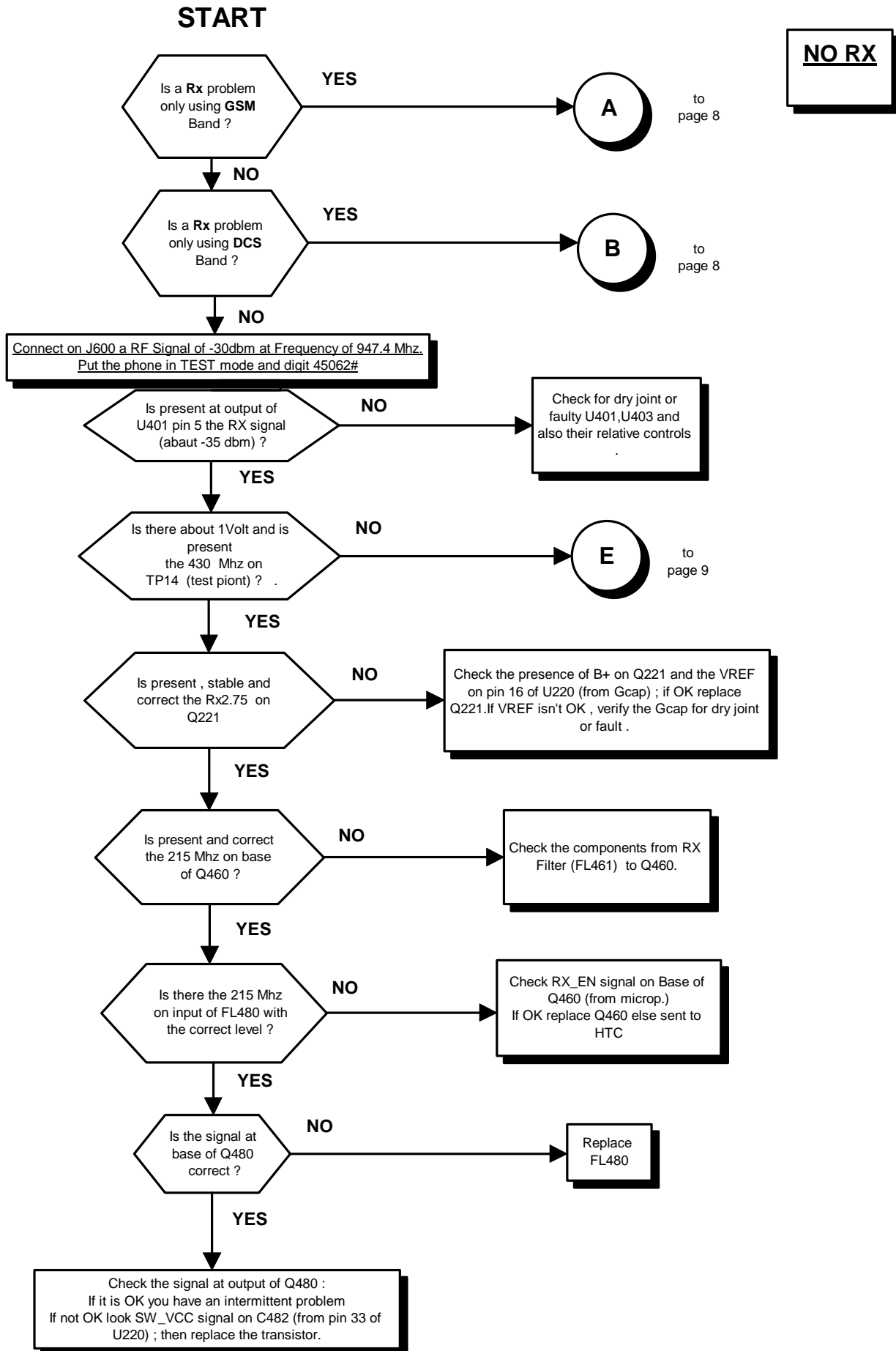
When the 68338 releases *RESET, it is pulled high by the internal resistor. The 68338 begins executing its Boot Code. If valid code is present, the RESET vector in the radio code is then executed. The Boot Code runs for about 512 cycles (39.6usec) before this new vector is executed.

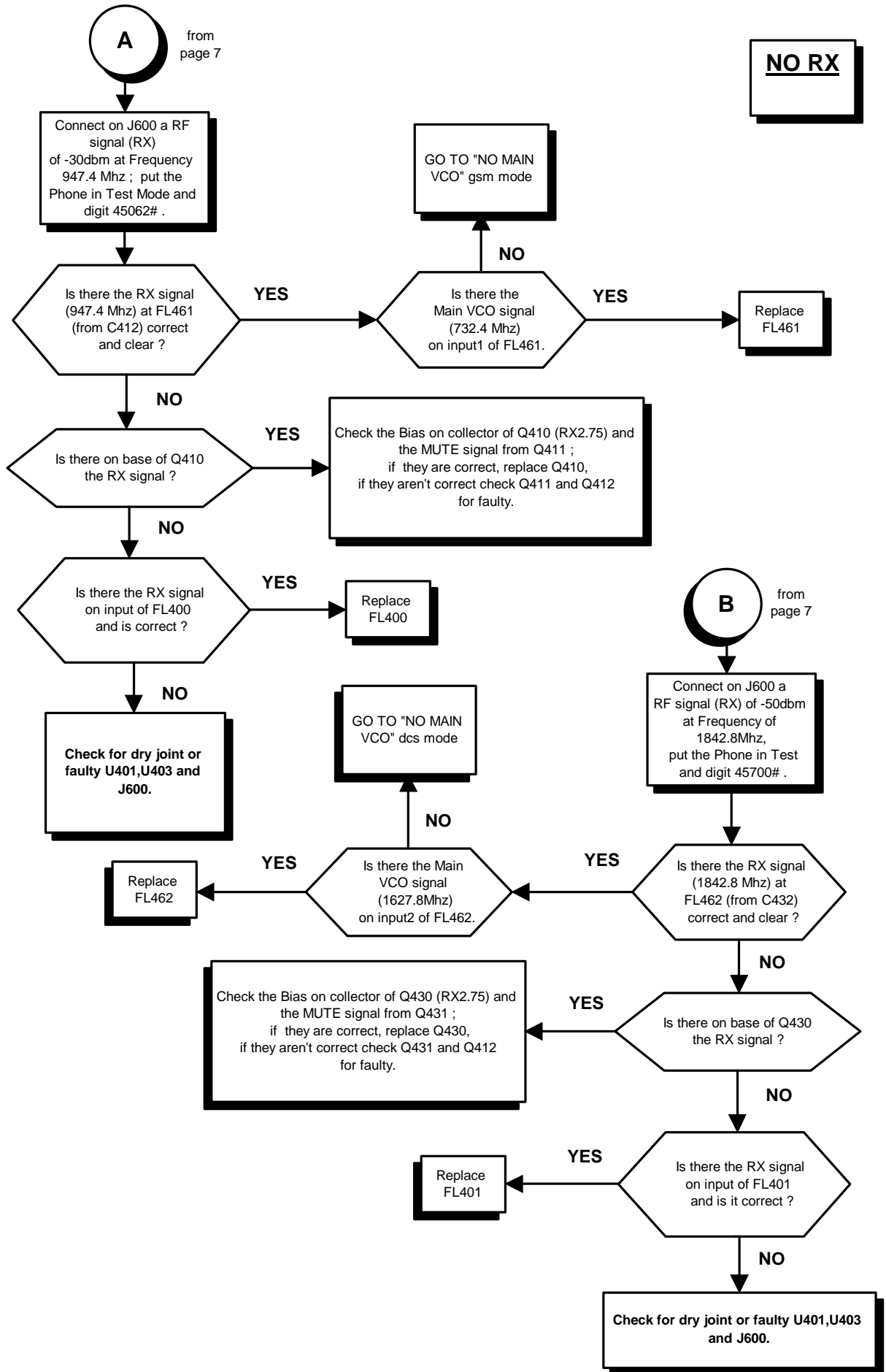
State 6

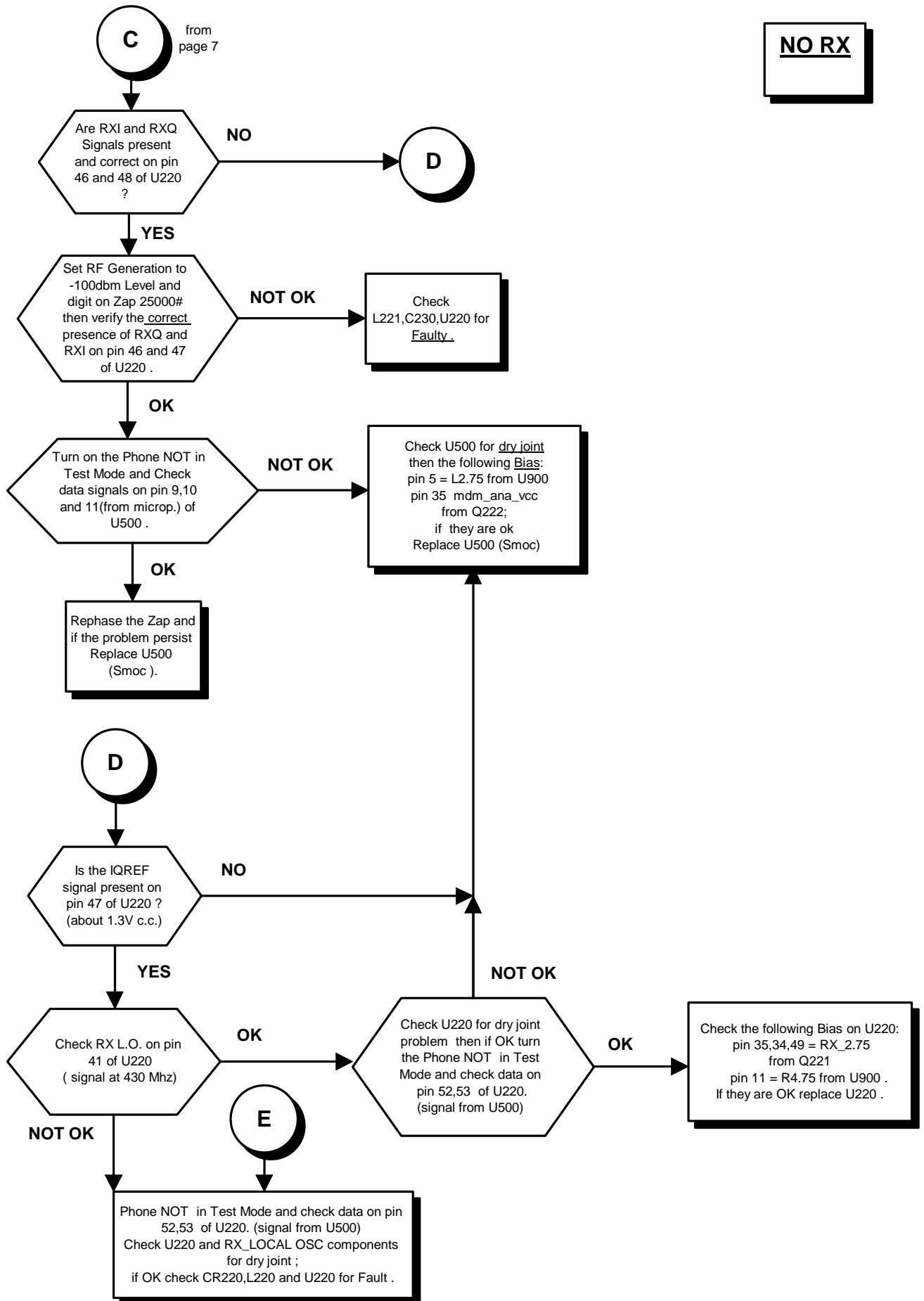
The 68338 holds *RESET low for 50usec during this state (an internally generated RE-SET).

State 7

When the 68338 releases *RESET, it is again pulled high by the internal resistor. All the processors in the system, including the 68338, then begin execution. During this state, the 68338 must drive the GCAP Lite's Watchdog line





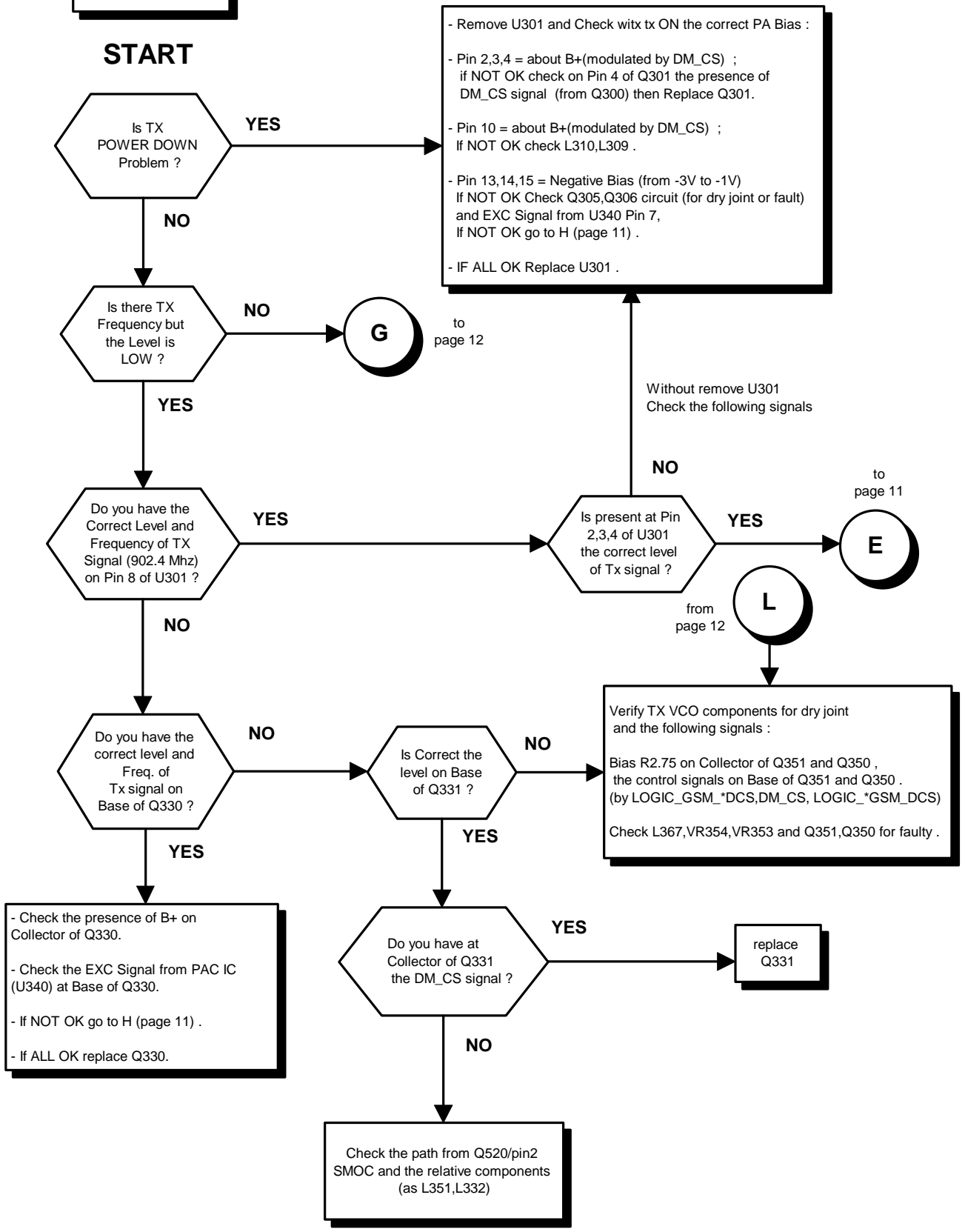


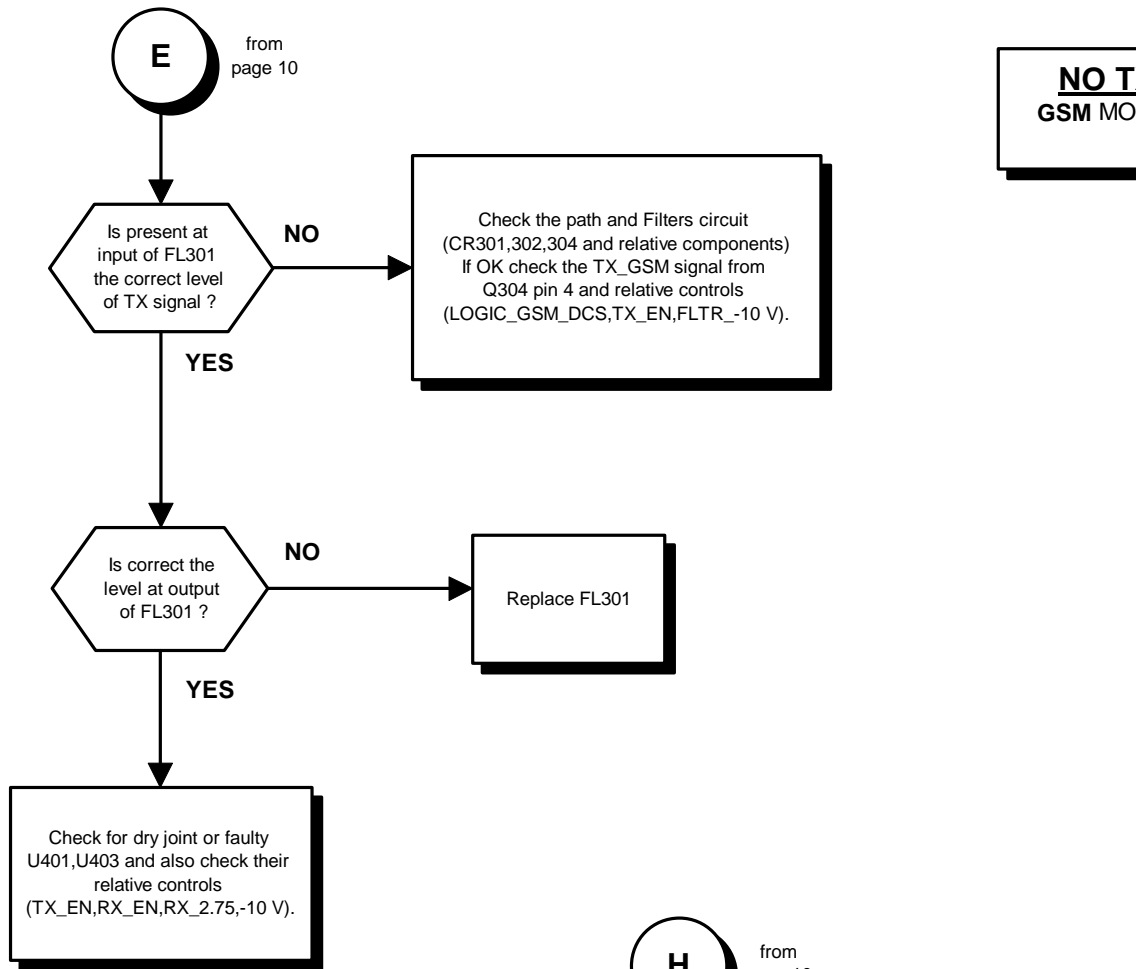
NO RX



**NO TX
GSM MODE**

- Connect on J600 a RF Spectrum analyzer.
- Put the Phone in TEST Mode and digit 110062#,1215#,40#.





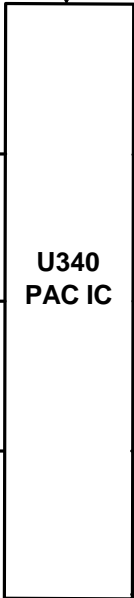
**NO TX
GSM MODE**

H from page 10

PIN 14 = DET_SW from SMOC PIN 14
If NOT OK go to NOTE 1

PIN 12 = SAT_DET (saturation signal) to SMOC. If NOT OK go to NOTE 1

PIN 8 = EXC signal to LEVEL SHIFT Circuit (Q305 and Q306)



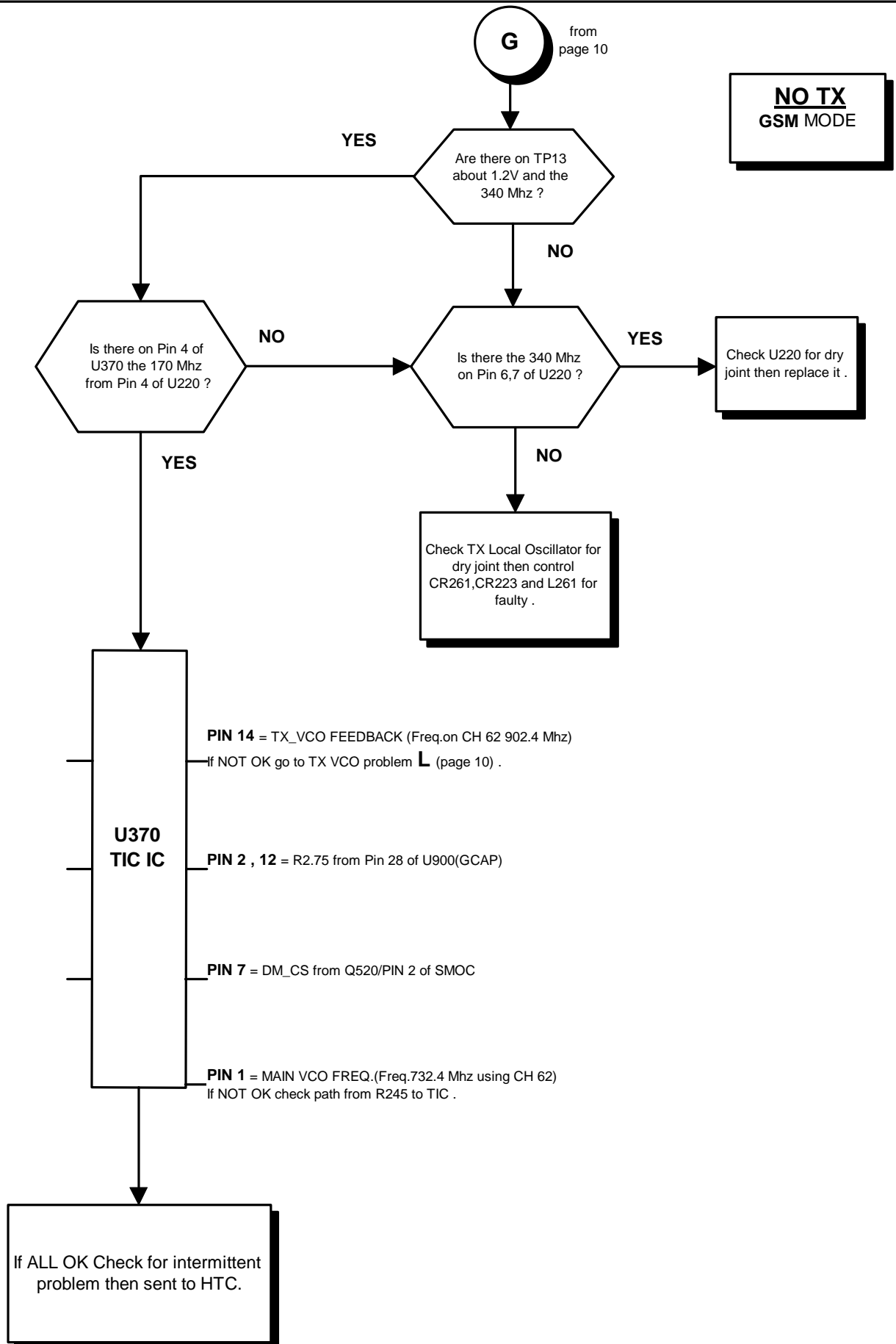
PIN 14 , 4 = TX_EN from Q501 (as Bias)

PIN 8 , 9 = AOC from PIN 39 of SMOC (PWR_CNTRL) If NOT OK go to NOTE 1

PIN 10 = TX_KEY from SMOC PIN 16
If NOT OK go to NOTE 1

PIN 2 = RF_IN (RF TX signal Feed back) from FL301.

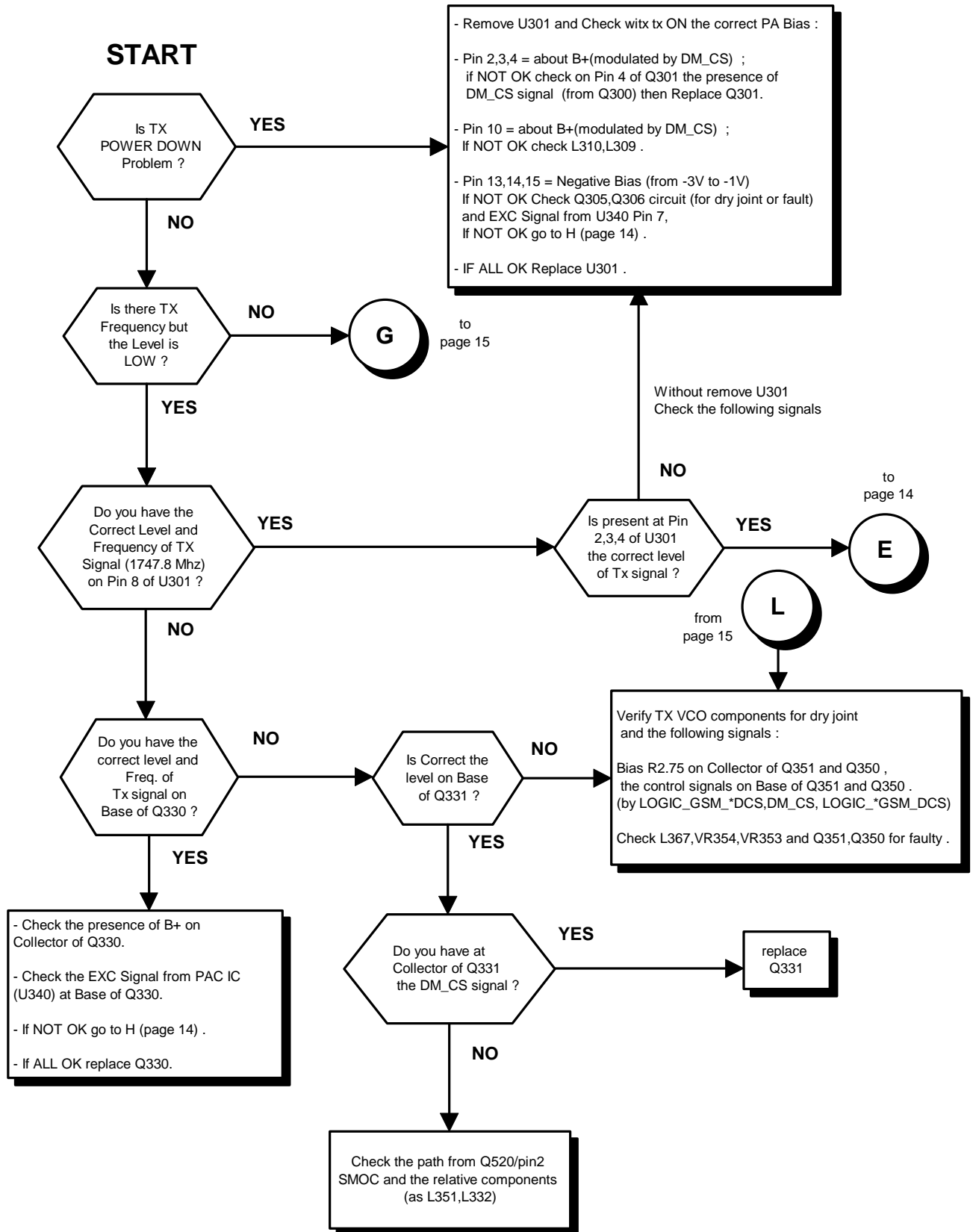
NOTE 1 : CHECK SMOC (U500) FOR DRY JOINT THEN VERIFY ITS CORRECT BIAS , IF OK REPLACE IT .





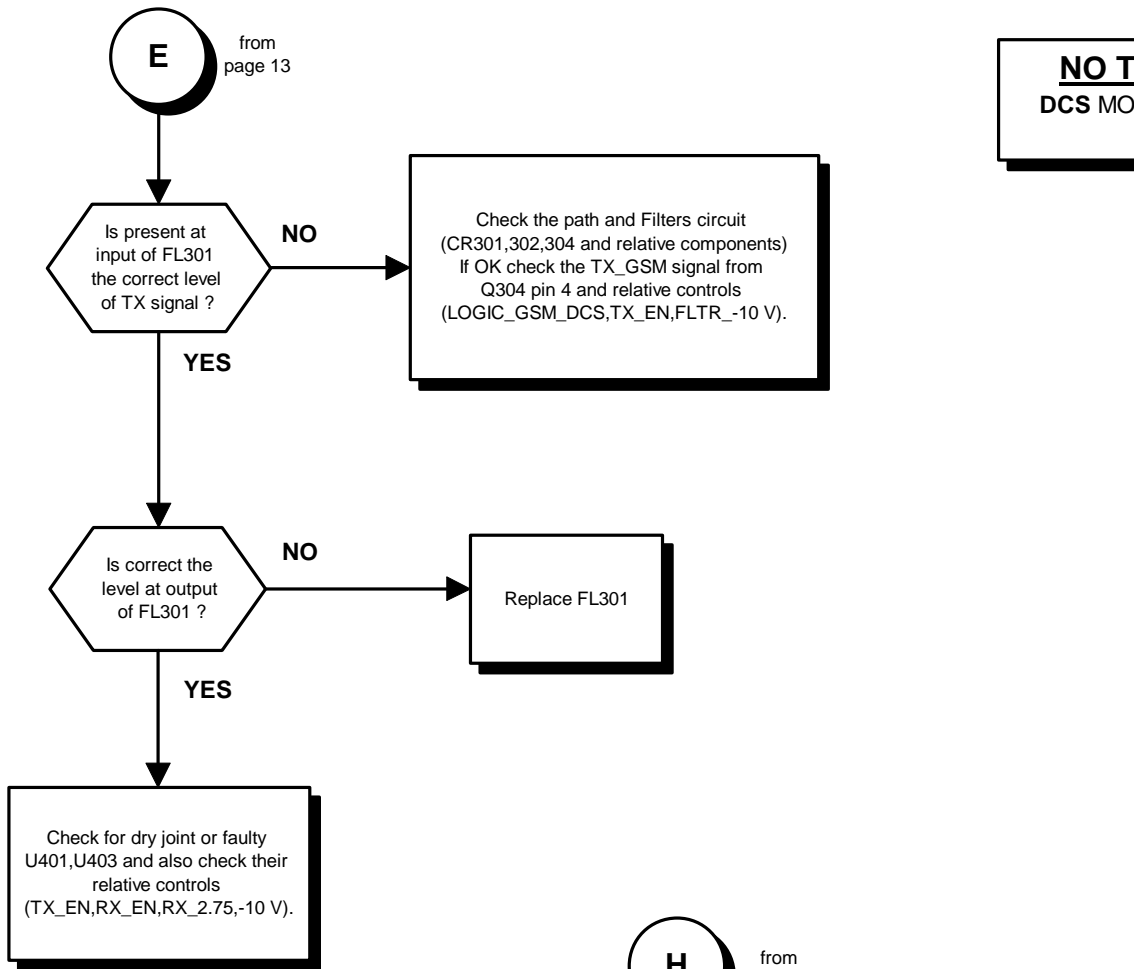
**NO TX
DCS MODE**

- Connect on J600 a RF Spectrum analyzer.
- Put the Phone in TEST Mode and digit 110700#,1215#,40#.





**NO TX
DCS MODE**

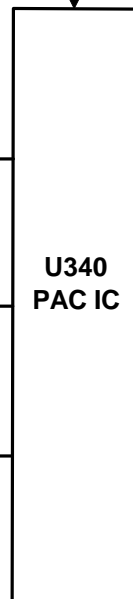


H from page 13

PIN 14 = DET_SW from SMOC PIN 14
If NOT OK go to NOTE 1

PIN 12 = SAT_DET (saturation signal)
to SMOC. If NOT OK go to NOTE 1

PIN 8 = EXC signal to
LEVEL SHIFT Circuit (Q305 and Q306)



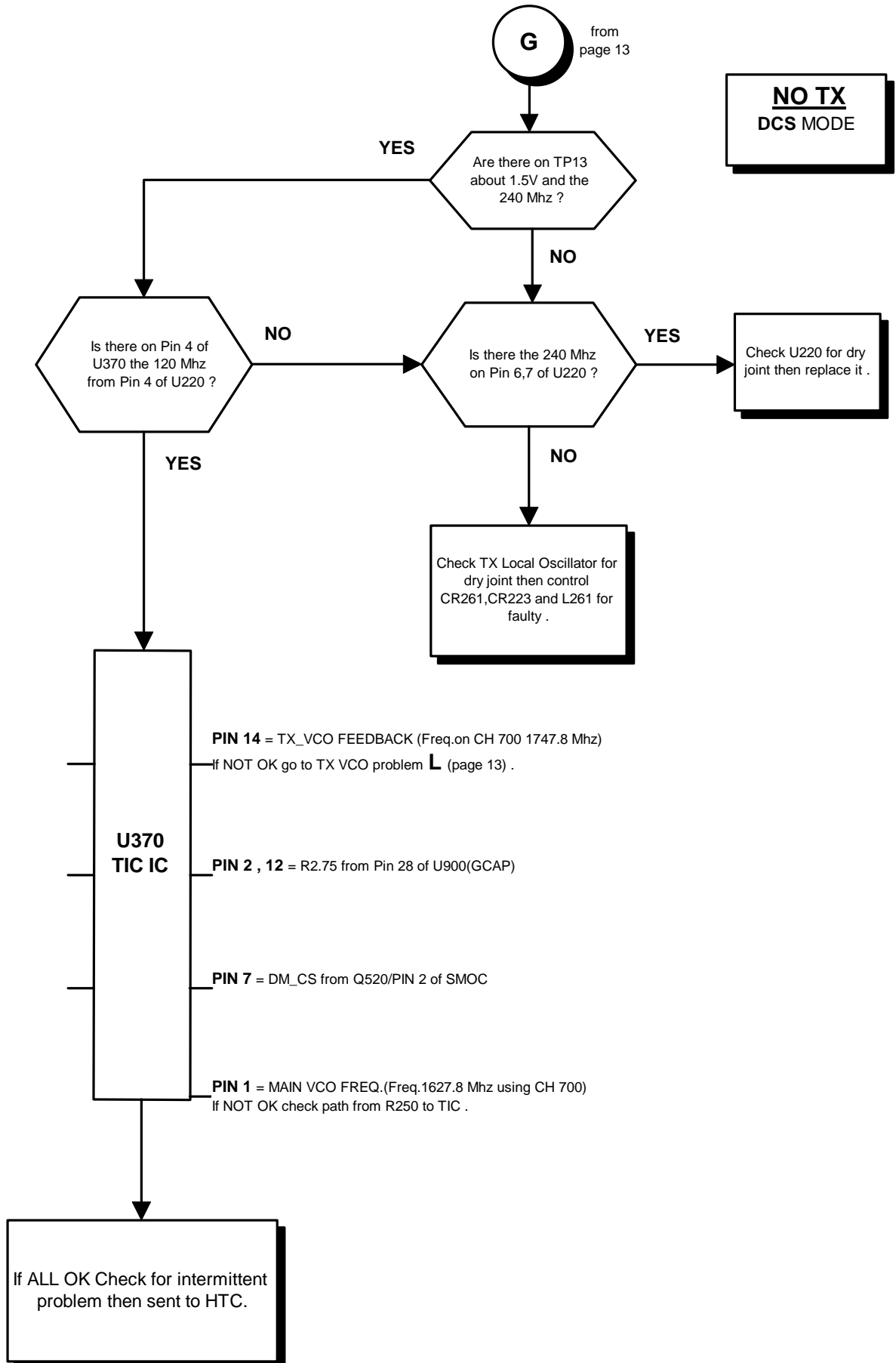
PIN 14 , 4 = TX_EN from Q501 (as Bias)

PIN 8 , 9 = AOC from PIN 39 of SMOC
(PWR_CNTRL) If NOT OK go to NOTE 1

PIN 10 = TX_KEY from SMOC PIN 16
If NOT OK go to NOTE 1

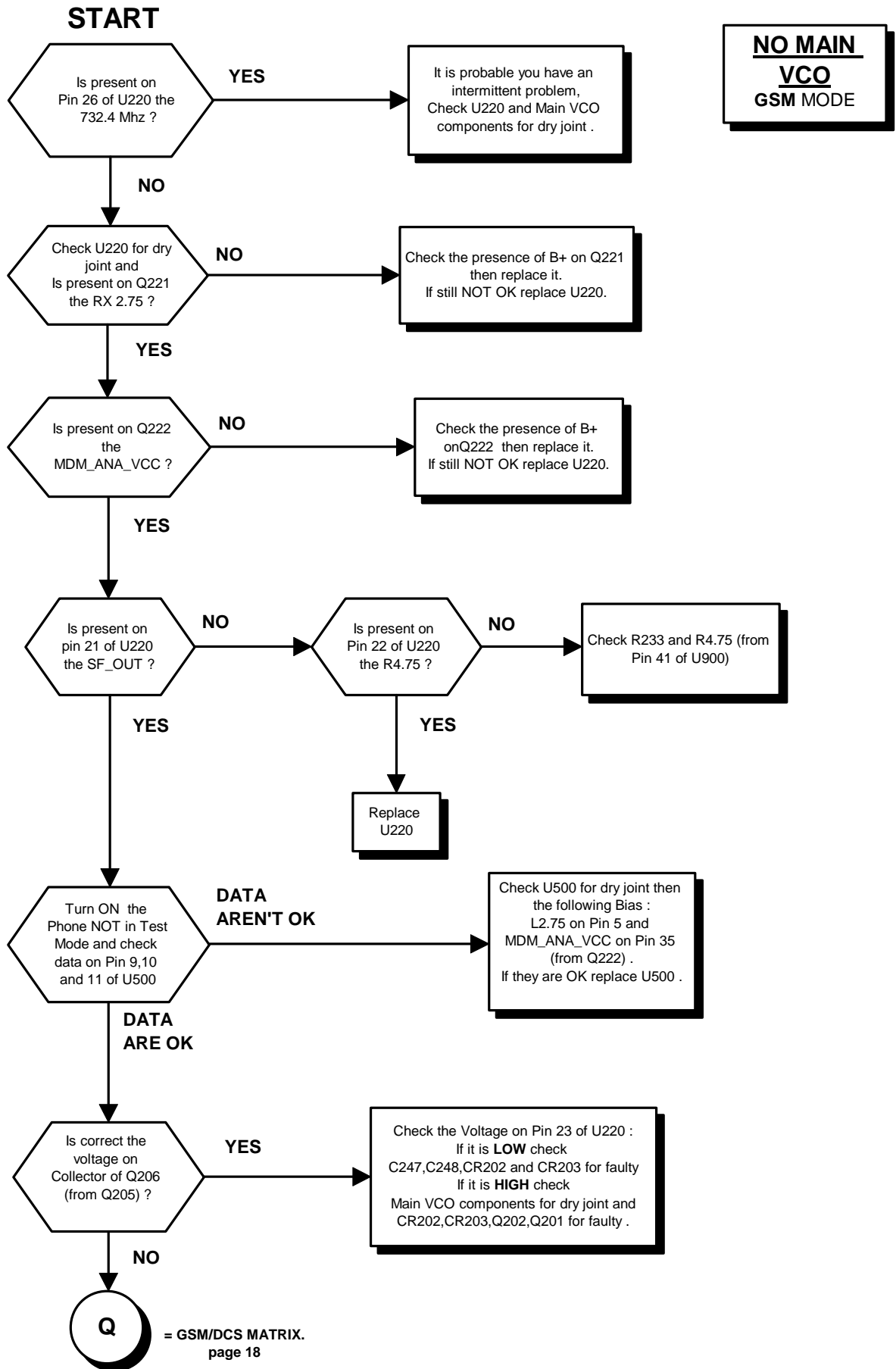
PIN 2 = RF_IN (RF TX signal Feed back)
from FL301.

NOTE 1 : CHECK SMOC (U500) FOR DRY JOINT THEN VERIFY ITS CORRECT BIAS , IF OK REPLACE IT .



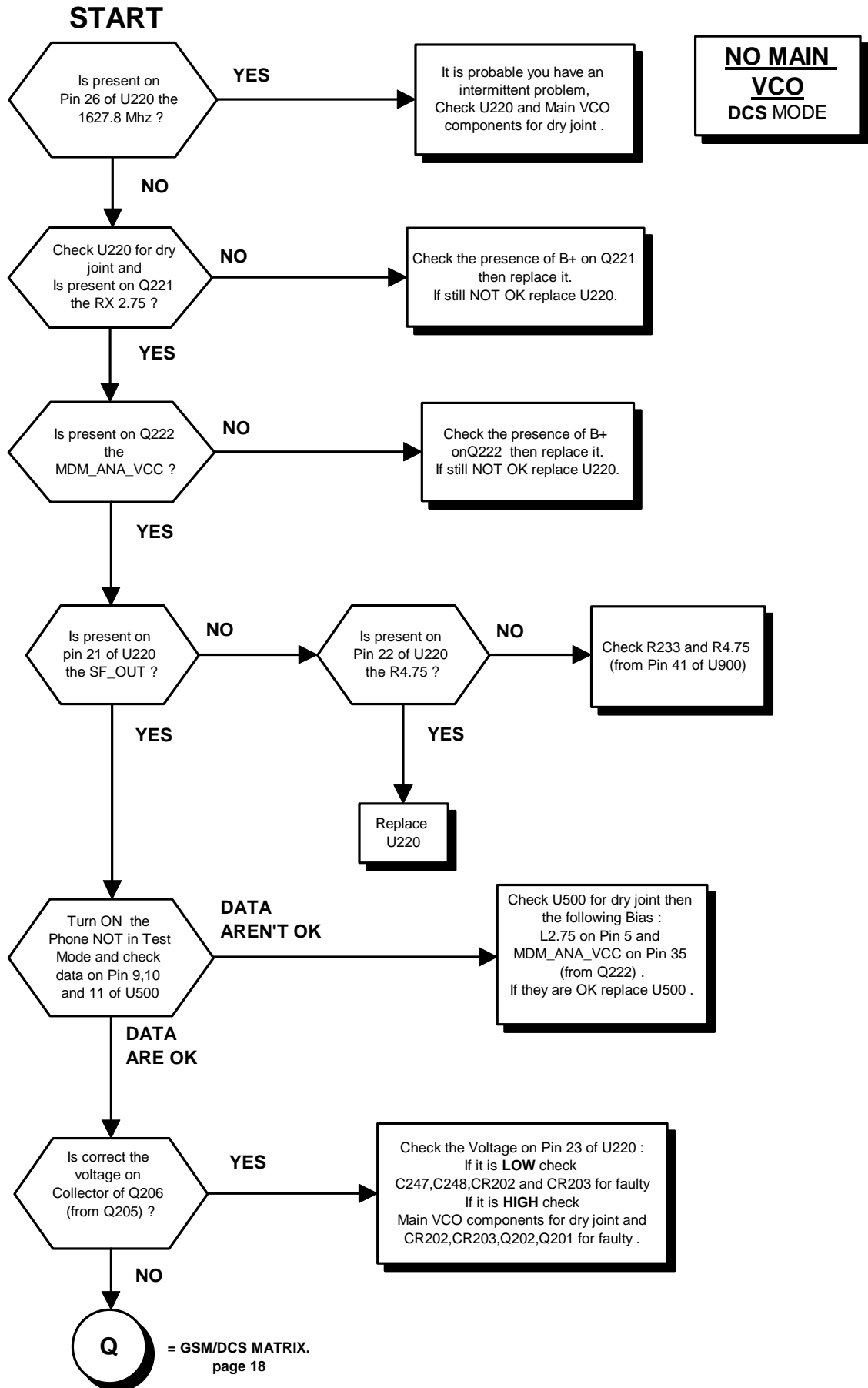


Put the Phone in TEST Mode and Digit 45062#





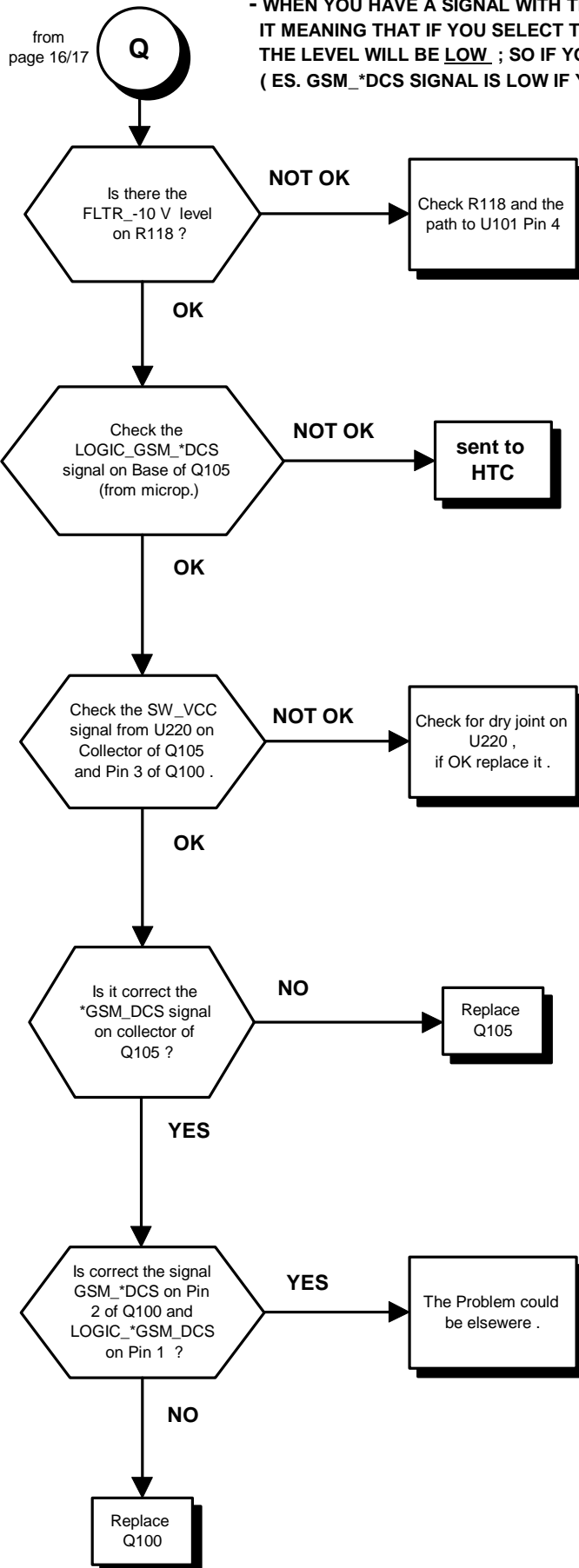
Put the Phone in TEST Mode and Digit 45700#



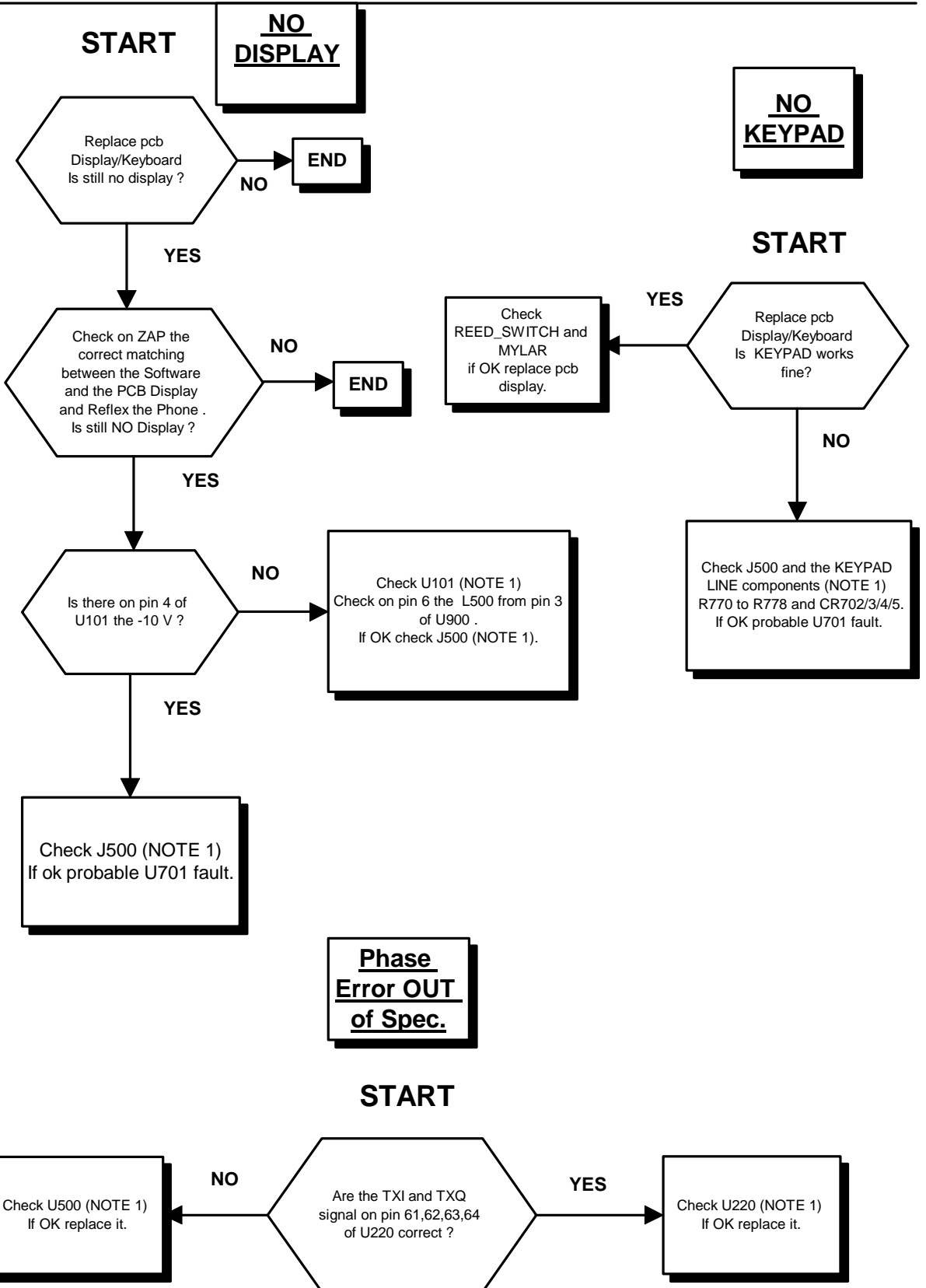


NOTE :

- WHEN YOU HAVE A SIGNAL WITH THE SYMBOL STAR (*) ES. GSM_*DCS , IT MEANING THAT IF YOU SELECT THE BAND WERE THERE IS THAT SYMBOL , THE LEVEL WILL BE LOW ; SO IF YOU SELECT THE OTHER BAND THE LEVEL WILL BE HIGH . (ES. GSM_*DCS SIGNAL IS LOW IF YOU SELECT A DCS CH AND HIGH WITH A GSM CH) .



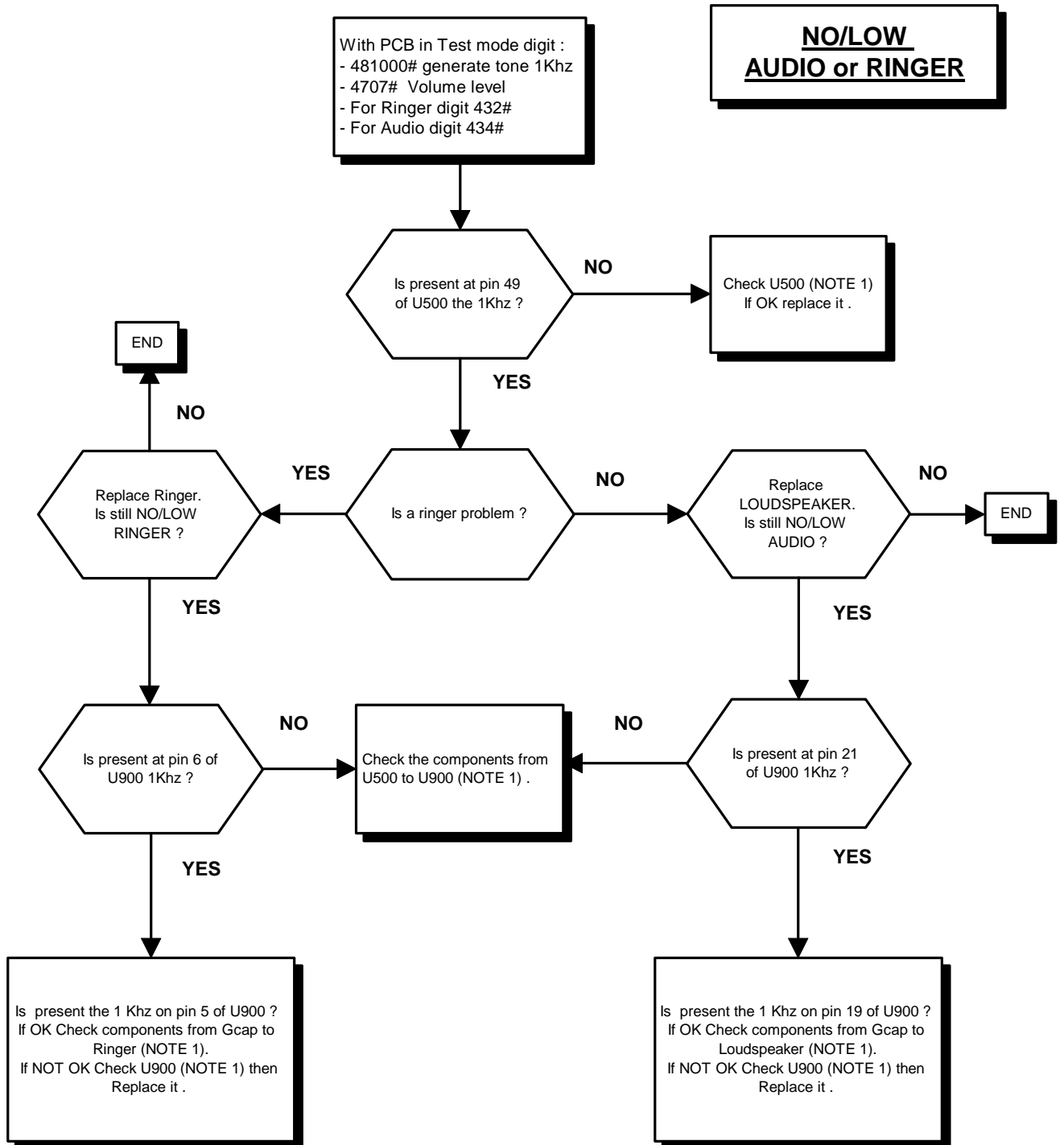
GSM DCS
MATRIX
ALL MODE



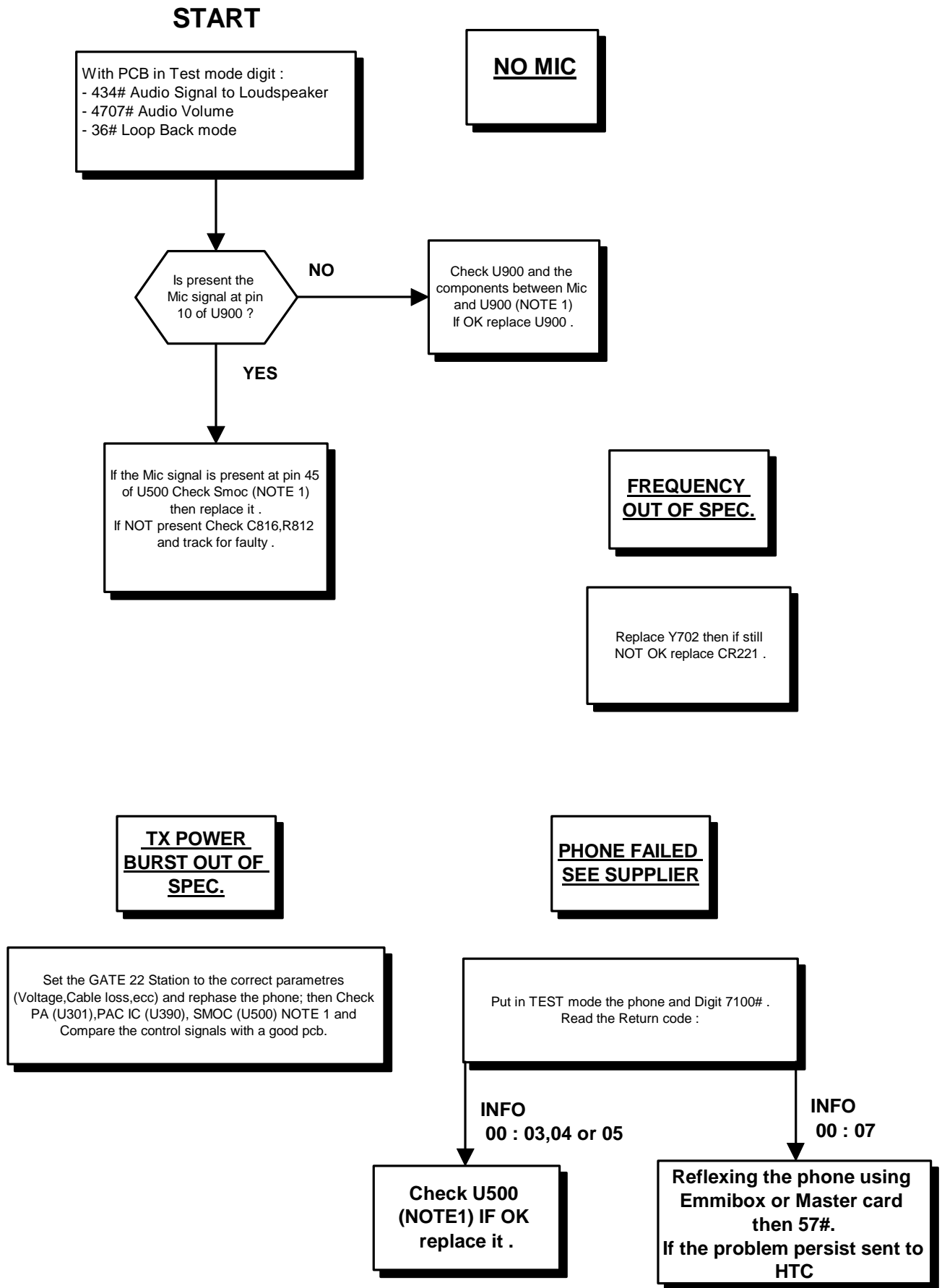
**NOTE 1 : CHECK THE COMPONENT/S FOR PHYSICALLY DAMAGE
DRY JOINT AND GOOD POSITION .**



START



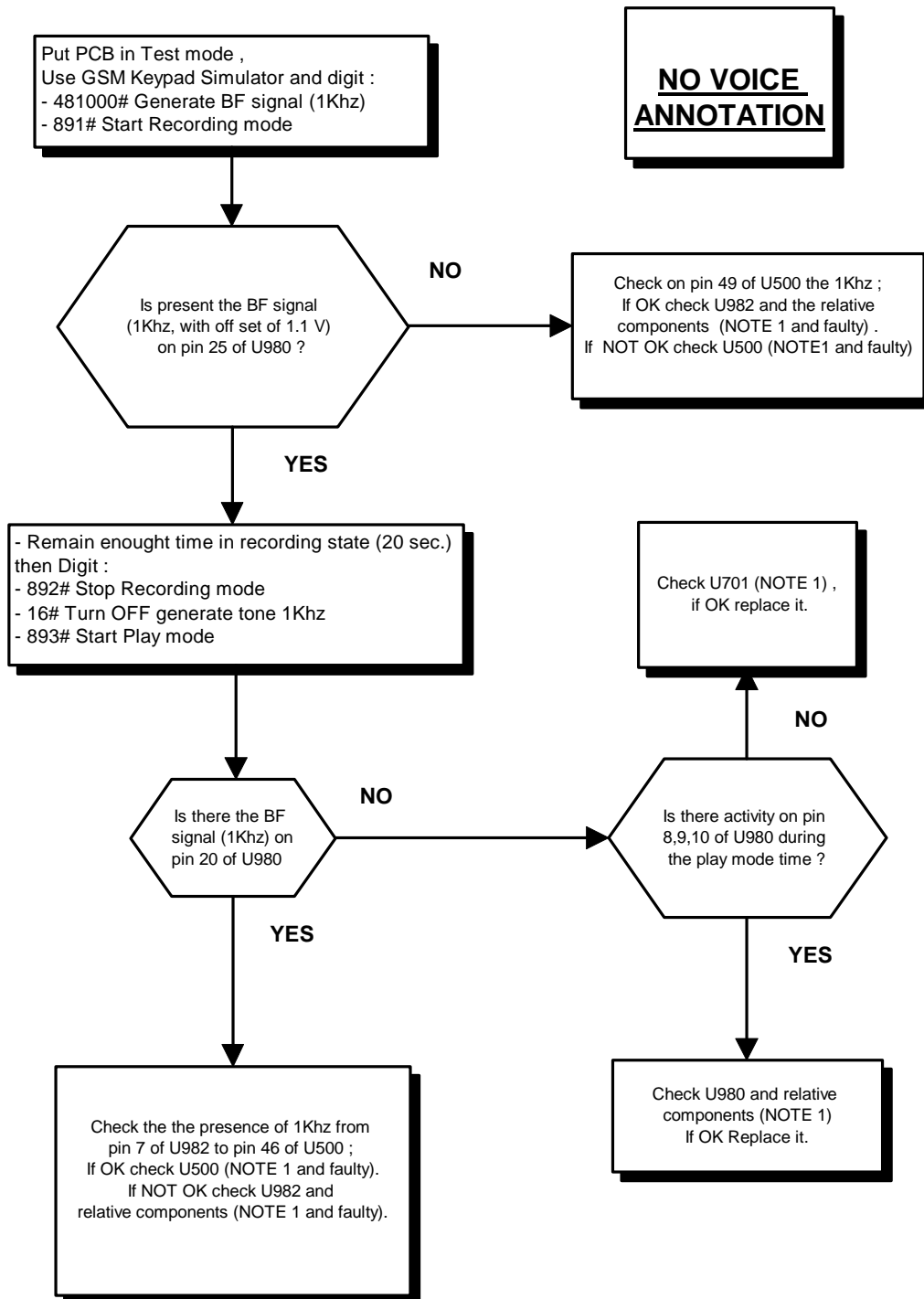
**NOTE 1 : CHECK THE COMPONENT/S FOR PHYSICALLY DAMAGE
DRY JOINT AND GOOD POSITION .**



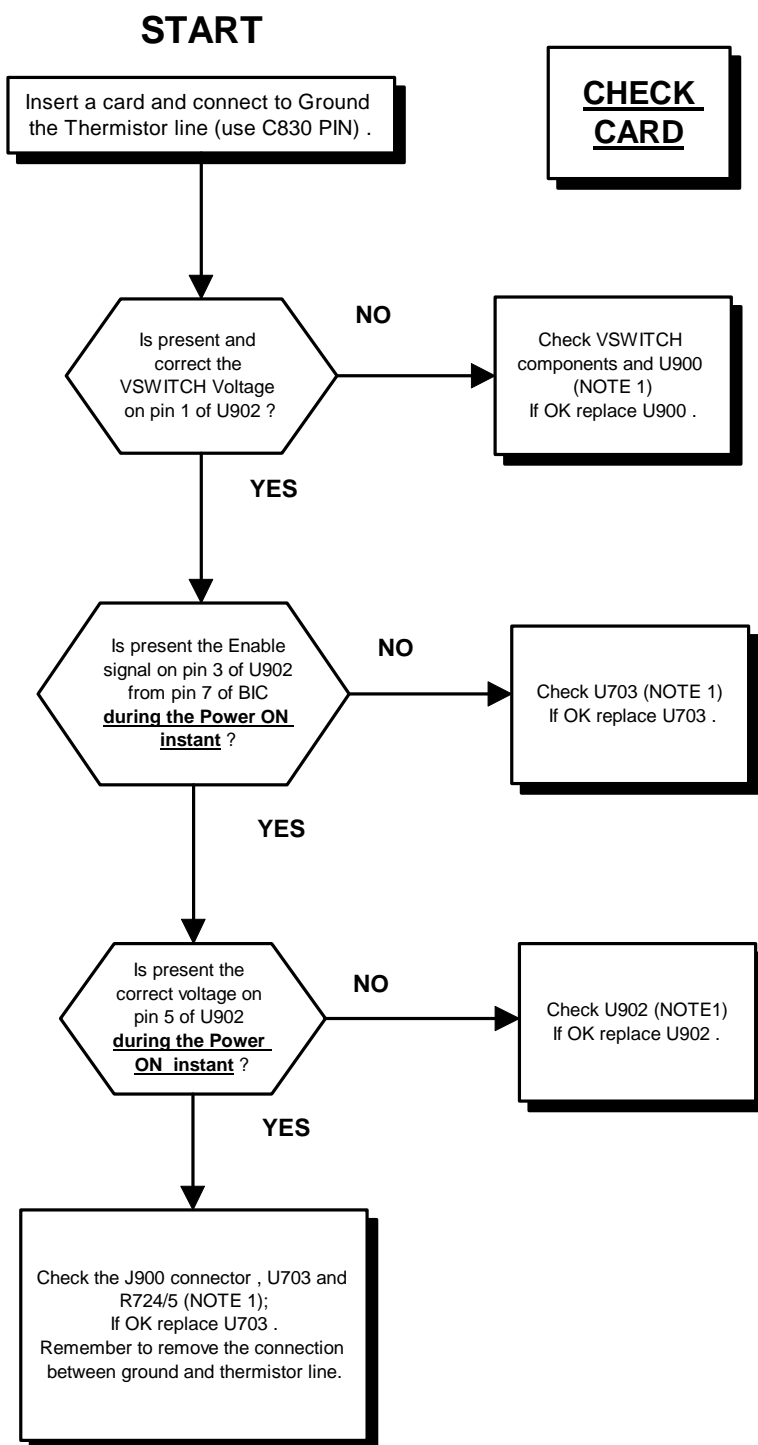
**NOTE 1 : CHECK THE COMPONENT/S FOR PHYSICALLY DAMAGE
DRY JOINT AND GOOD POSITION .**



START



**NOTE 1 : CHECK THE COMPONENT/S FOR PHYSICALLY DAMAGE
DRY JOINT AND GOOD POSITION .**



NOTE 1 : CHECK THE COMPONENT/S FOR PHYSICALLY DAMAGE DRY JOINT AND GOOD POSITION .





