

GalaxyS7 Edge Repair Tips Troubleshooting Guide (by Part)

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- This guide is for a diagnosis and repair.
- This guide gives the solution for normal case, so it can be different in case of specific cases.
- The repair of component level is not required in this guide, you can refer to the service manual if you want. This is for repair L1 & 2.
- The PBA should be treated under ESD protection environment.
- It should be confirmed at the first step if it's normal warranty repair or not.

For the following cases, it should be classed as out of warranty

☞ Expired warranty period, Customer faults and Rooted phone.

- Final test is mandatory for all repaired phone regardless of repair result.

Tip 1. PBA - No power

Tip 2. PBA - Freezing (during booting up)

Tip 3. PBA - Freezing (during operation)

Tip 4. PBA - Auto power off / rebooting

Tip 5. PBA - Transmission & Receiving

Tip 6. PBA - No SVC

Tip 7. PBA - Battery drains rapidly

Tip 8. PBA - No or faulty display

Tip 9. OCTA - No or faulty display

Tip 10. OCTA - Missing line or dot

Tip 11. OCTA - Touch problem

Tip 12. Sub PBA - Sub key problem

Tip 13. Sub PBA - No Charging

Tip 14. Speaker - Sound problem

Tip 15. Receiver - Receiving voice problem

Tip 16. Mic - Sending voice problem (on RCV)

Tip 17. Mic - Sending voice problem (on SPK)

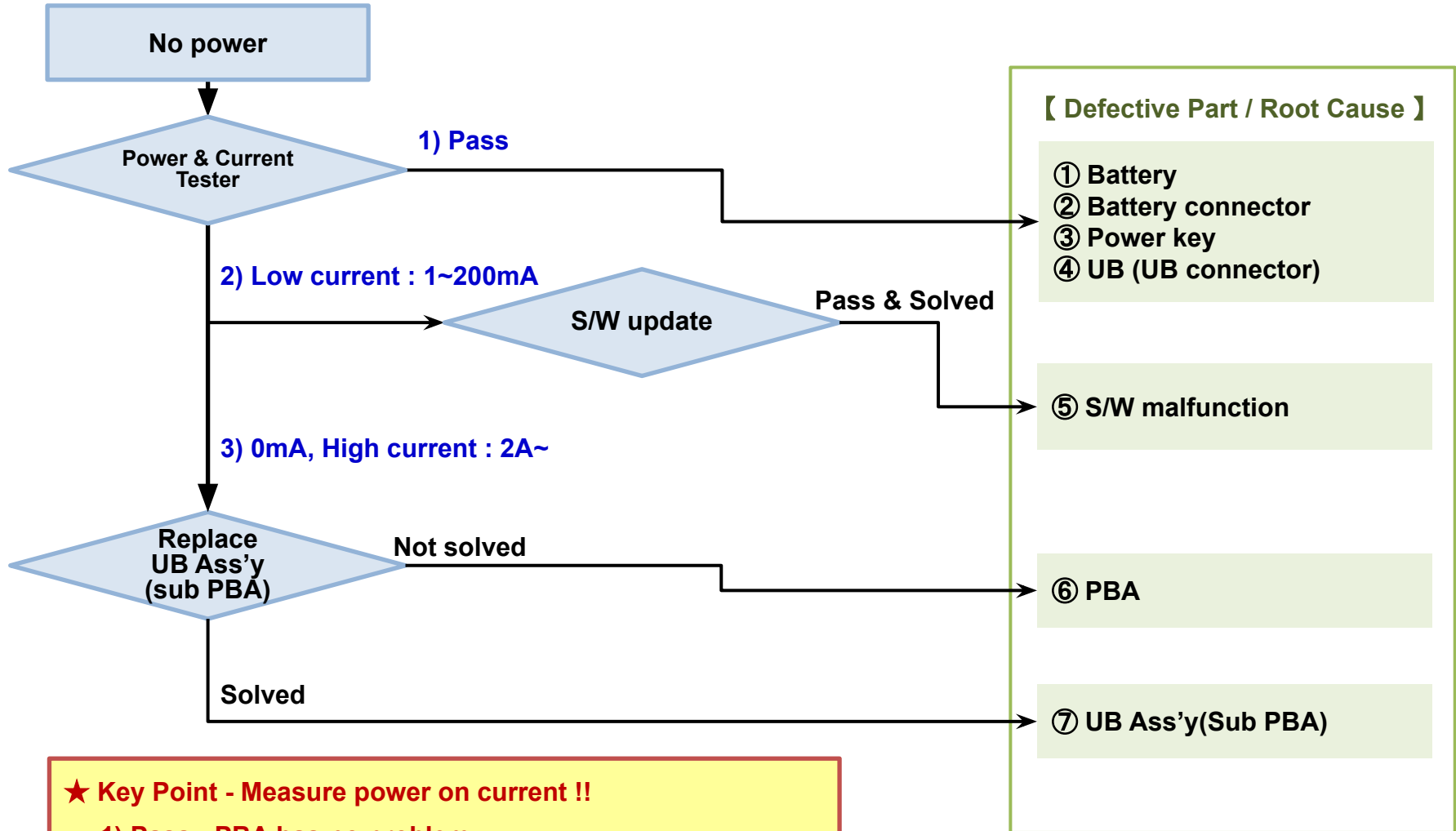
Tip 18. Camera - Camera problem

Tip 19. Keys - Key problem

Tip 20. Sensors

Tip 1. PBA - No Power

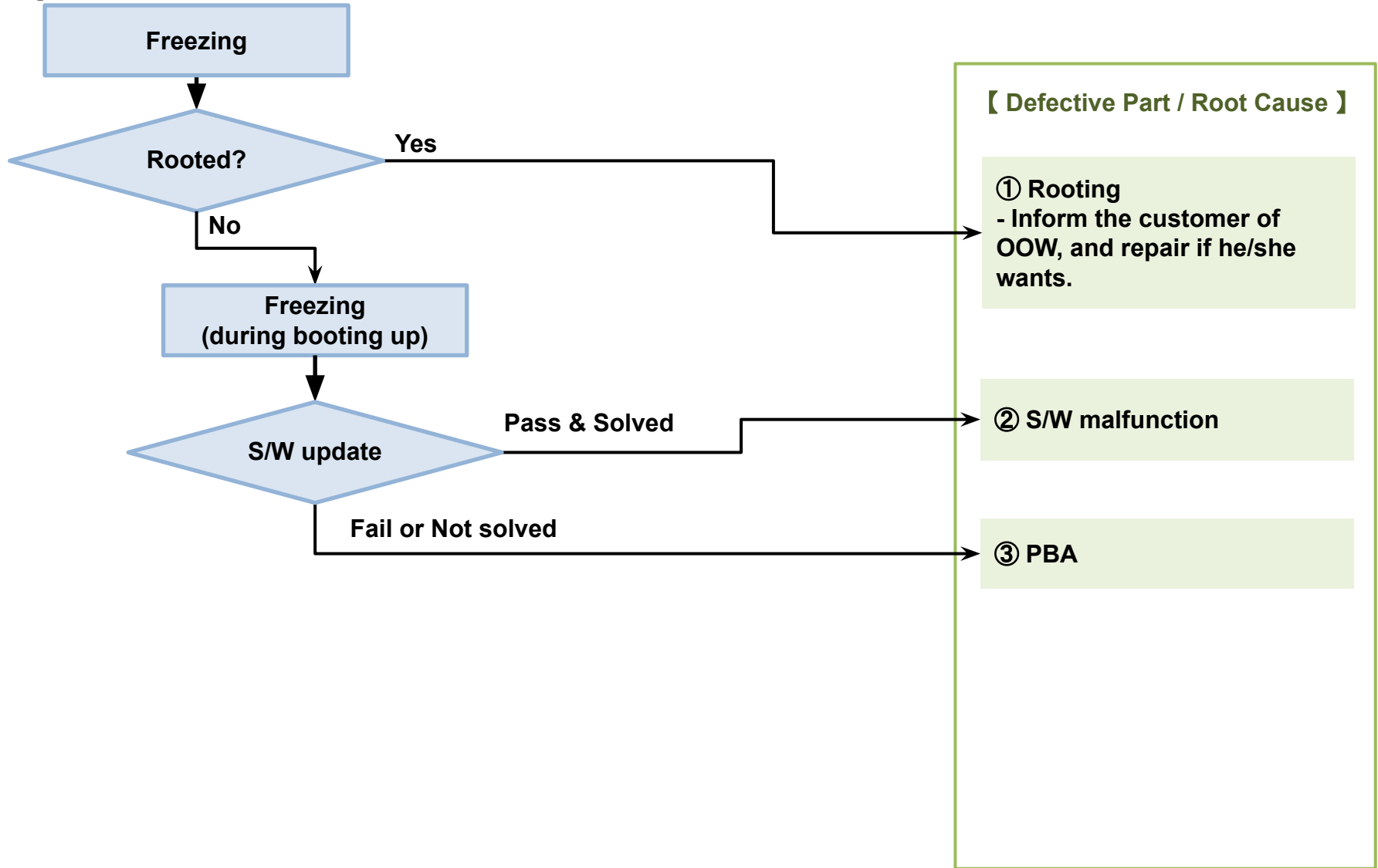
Rev 01



★ Key Point - Measure power on current !!

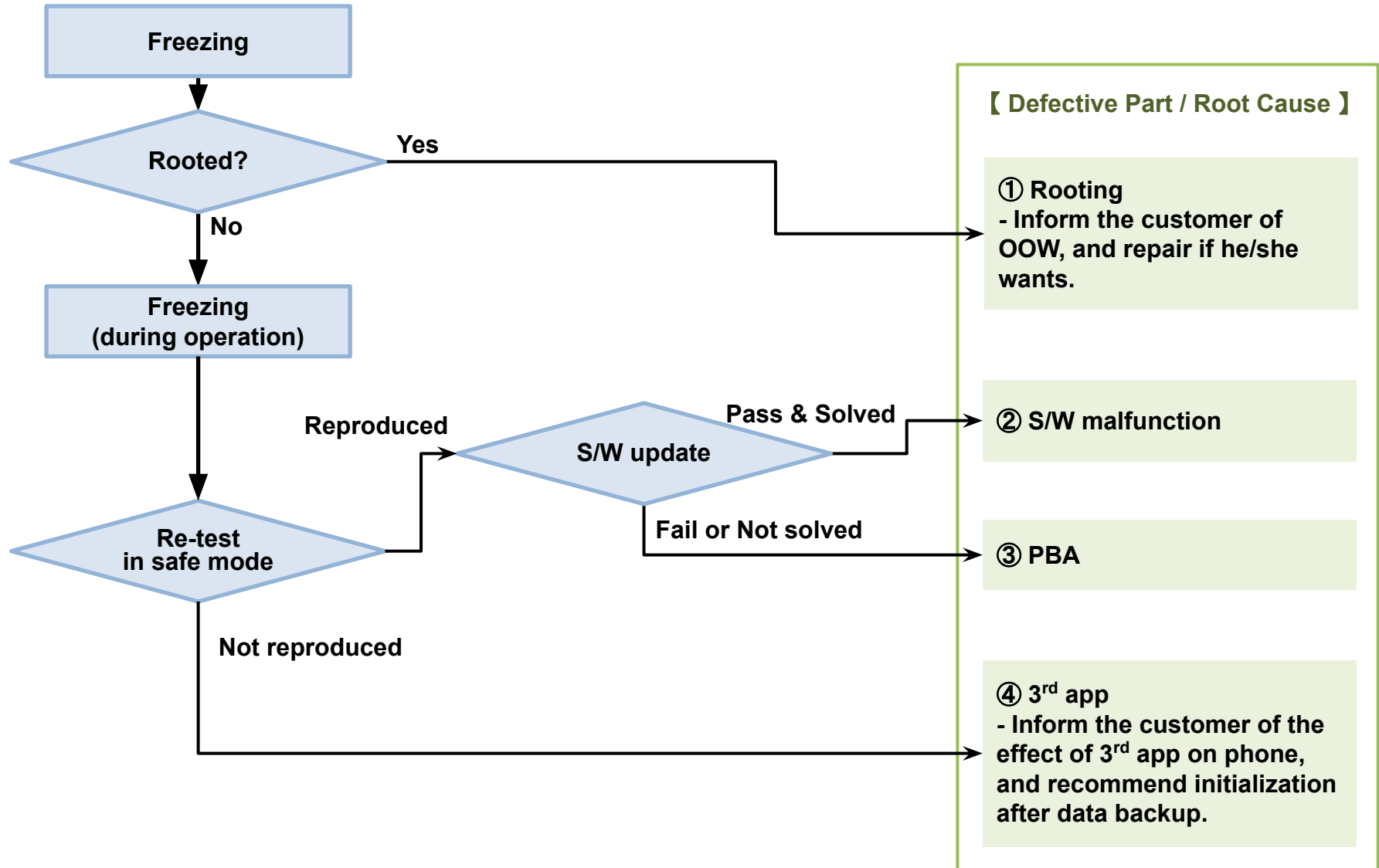
- 1) Pass : PBA has no problem
- 2) Low (1~200mA) : S/W or Memory area problem
- 3) 0mA or High : Dead or Circuit short

Tip 2. PBA - Freezing (during booting up)



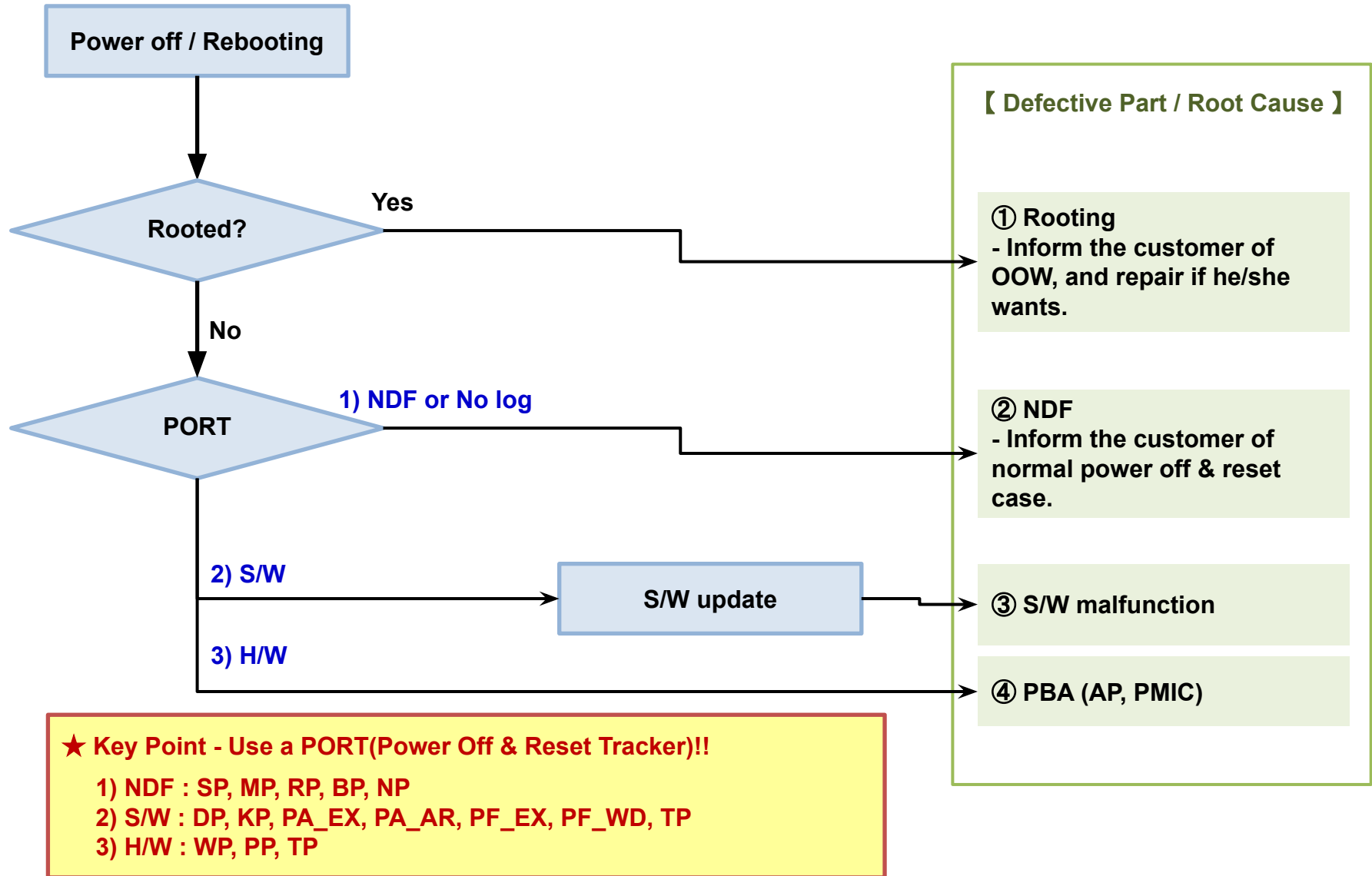
Tip 3. PBA - Freezing (during operation)

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Tip 4. PBA - Auto power off / rebooting

Rev 01



Tip 4. PBA - Auto power off / rebooting

Rev 01

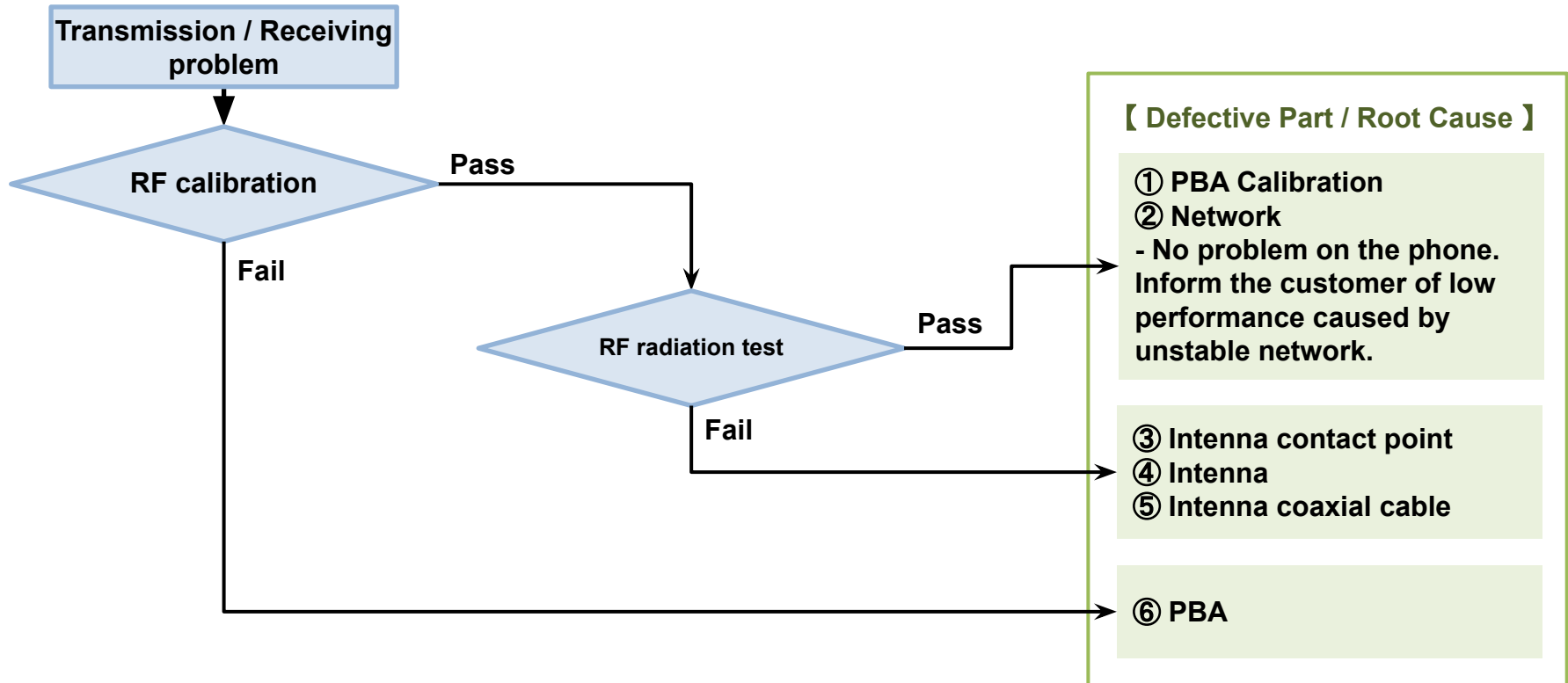
PORT(Power Off & Reset Tracker)

- *#9900# → Run dumpstate/logcat/modem log → OK → OK → Copy to sdcard (include CP Ramdump)
- Connect the device to PC and open “RR.p” in “log” folder.
- The reason codes in detail

Name	Meaning	Description	Defect part
SP	SMPL : Sudden Momentary Power Loss	Sudden Momentary Power Loss Can happen when battery is detached & attached very fast within 0.5 sec.	NDF
WP	WTSR : Watchdog Timeout and Soft Reset	Malfunction of AP chipset	H/W defect
DP	WatchDog reset	System lockup, Abnormal watchdog reset	S/W defect
KP	Kernel Panic	Abnormal reset by Kernel panic	S/W defect
MP	Manual Reset	Press & hold power key for 7 sec and power off	NDF
PP	Power reset	Abnormal reset by PMIC	H/W defect
RP	UseR reboot	Normal rebooting	NDF
BP	Bootloader reset	After downloading binary or rebooting from recovery mode	NDF
NP	Normal power on	Normal power on	NDF
TP	Thermal reset	When the temperature is too high	H/W defect S/W defect with a low percentage
PA_EX		Exception happened on Phone process	S/W defect
PA_AR		ANR happened on Phone process	S/W defect
PF_EX		Exception happened on System server	S/W defect
PF_WD		Watchdog happened on System server	S/W defect

Tip 5. PBA - Transmission & Receiving

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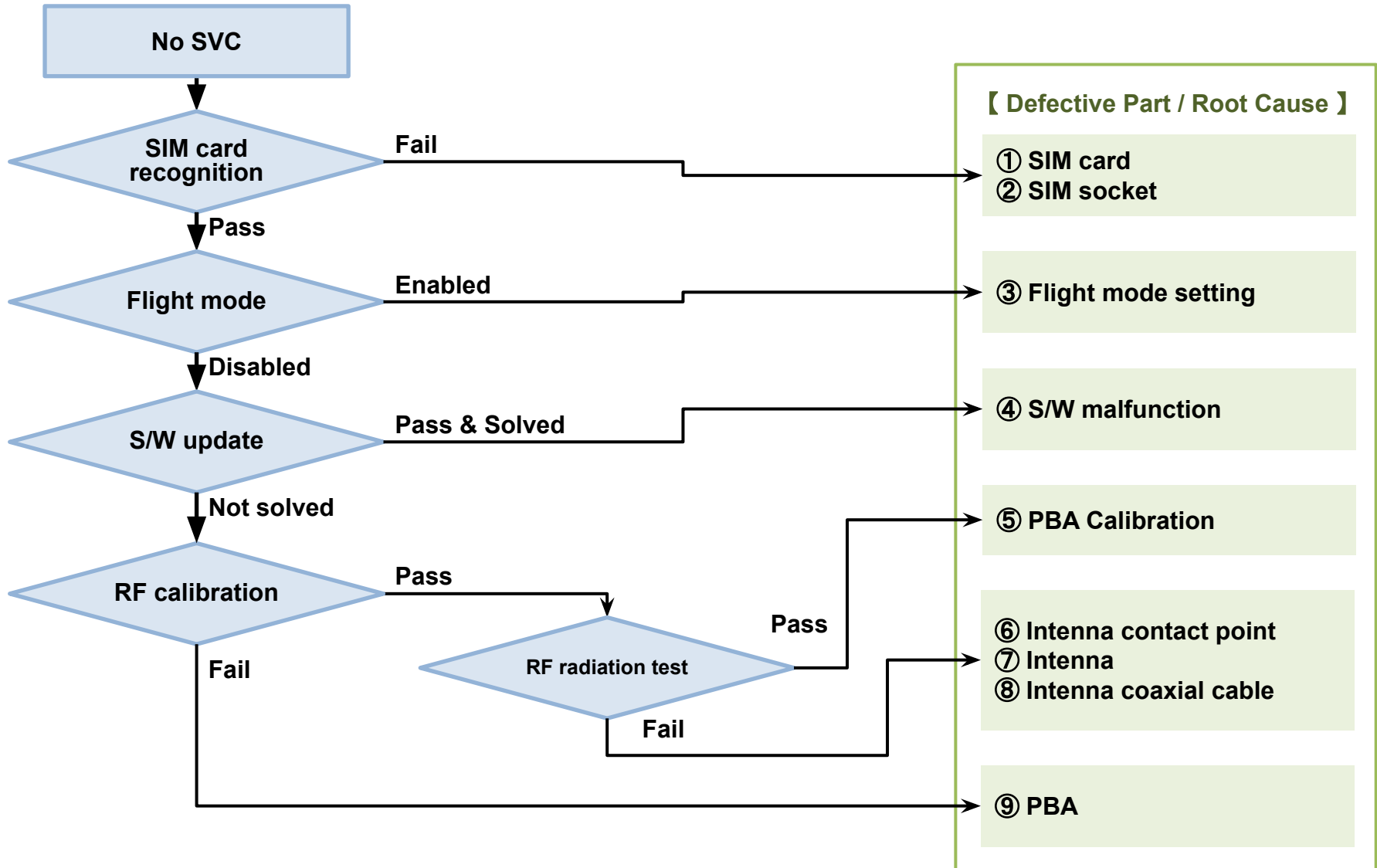


★ Key Point - Confirm if PBA is defective or not !!

RF calibration	RF radiation test	Defective part
Pass	Pass	No problem on the phone
Pass	Fail	Not PBA
Fail	-	PBA

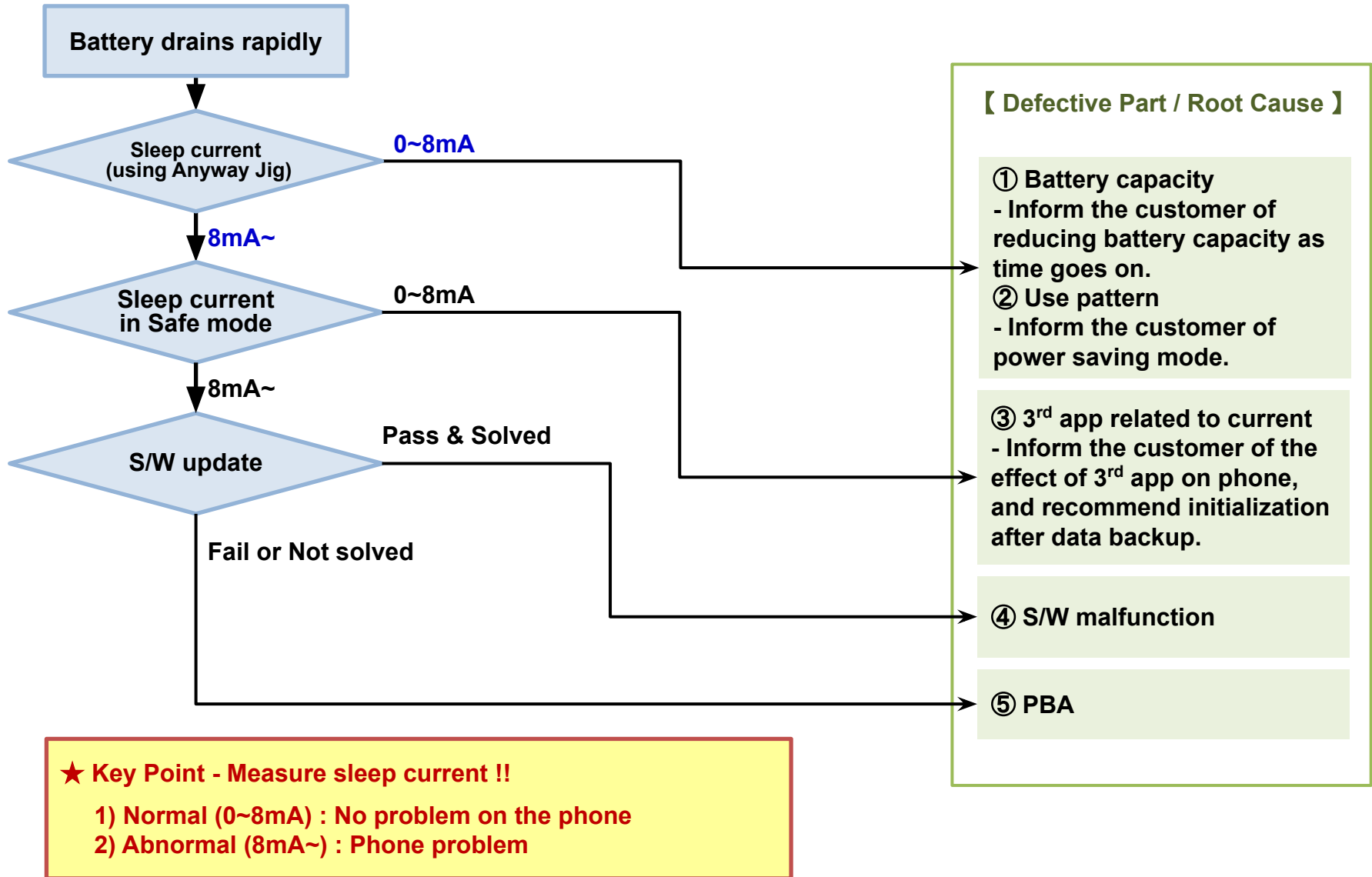
Tip 6. PBA - No SVC

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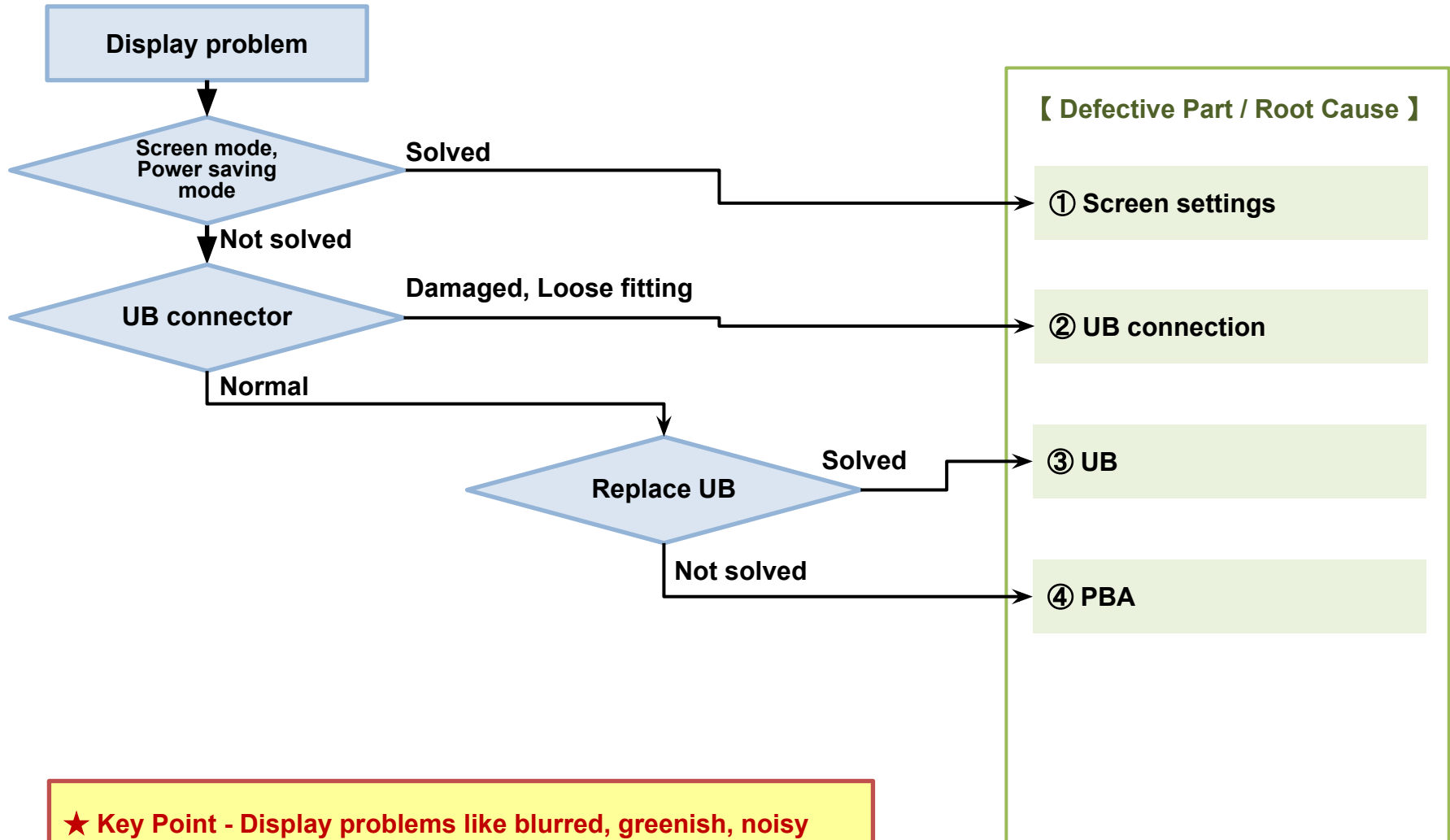
Tip 7. PBA - Battery drains rapidly

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Tip 8. UB - No or faulty display

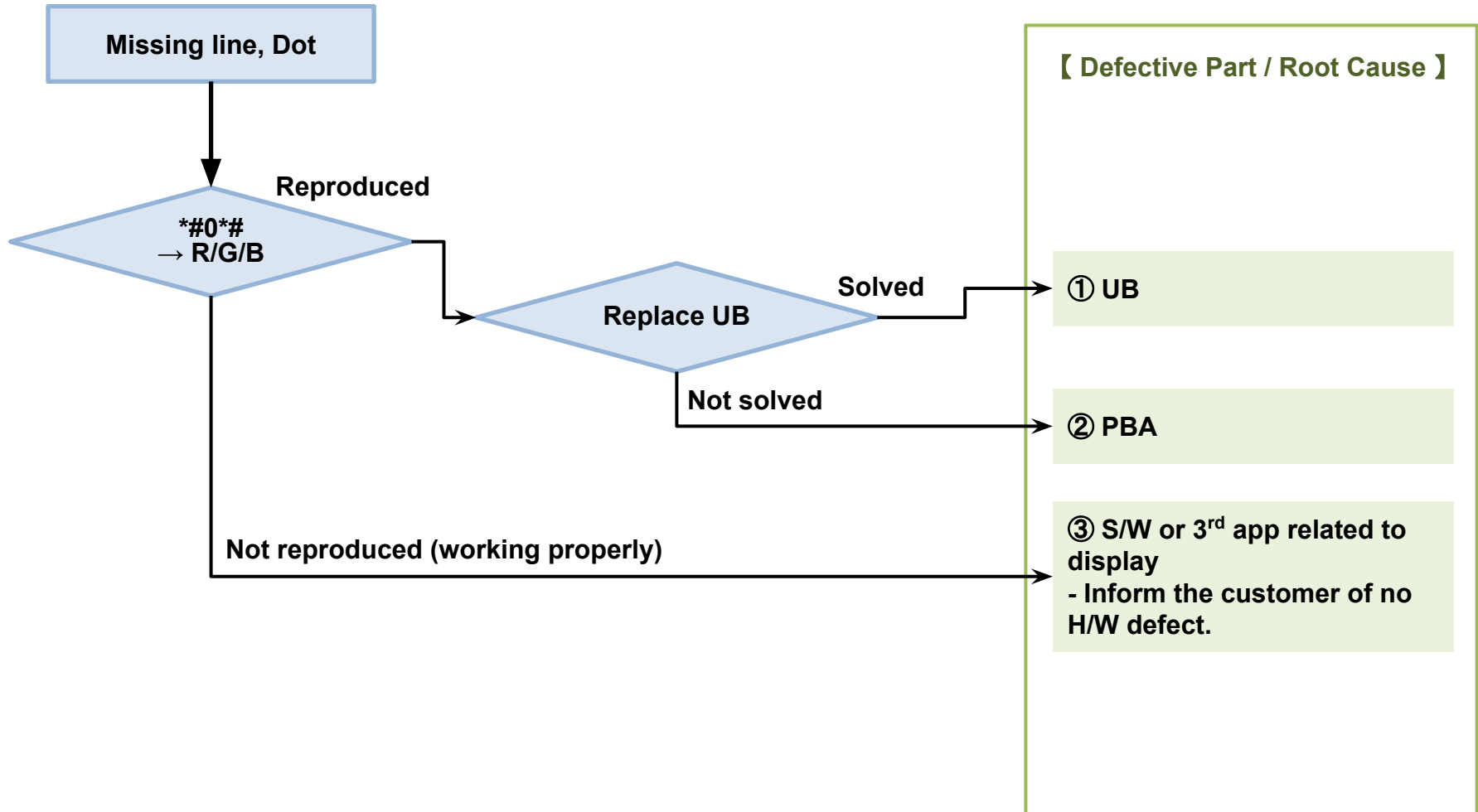
Rev 01



★ Key Point - Display problems like blurred, greenish, noisy and black display can happen when the UB is not connected firmly.

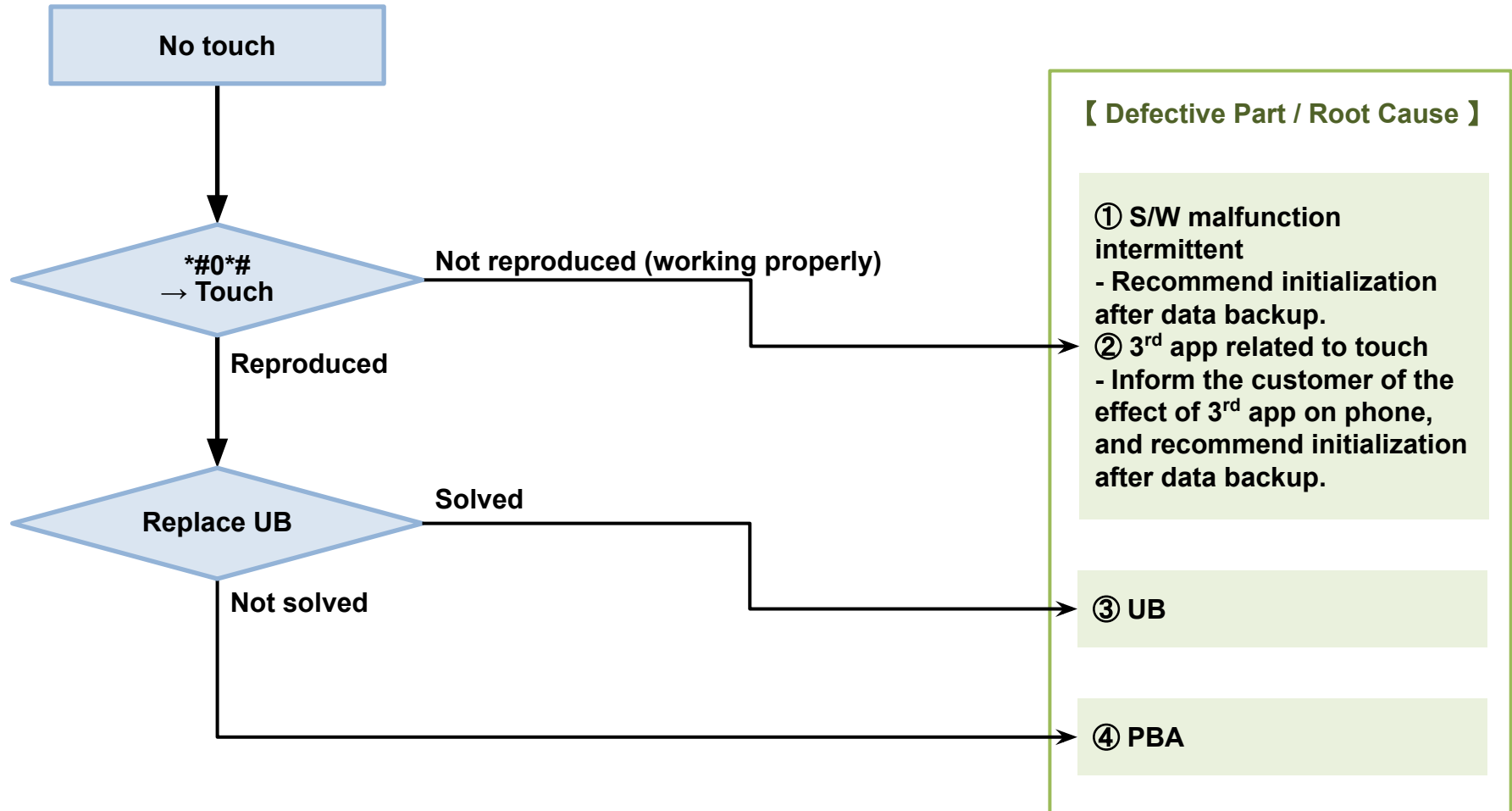
Tip 9. OCTA – Missing line, Dot on display

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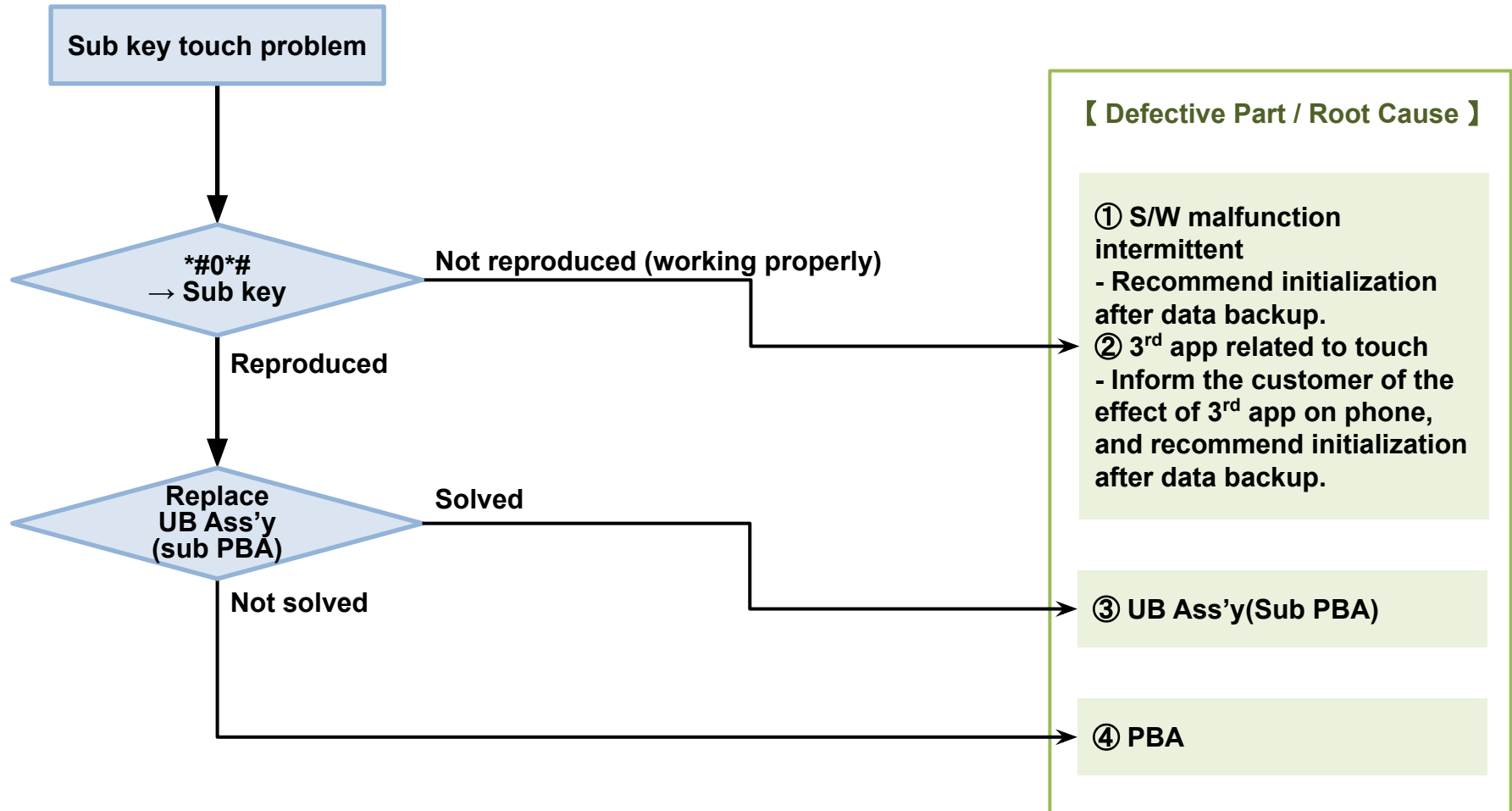
Tip 10. OCTA - Touch problem

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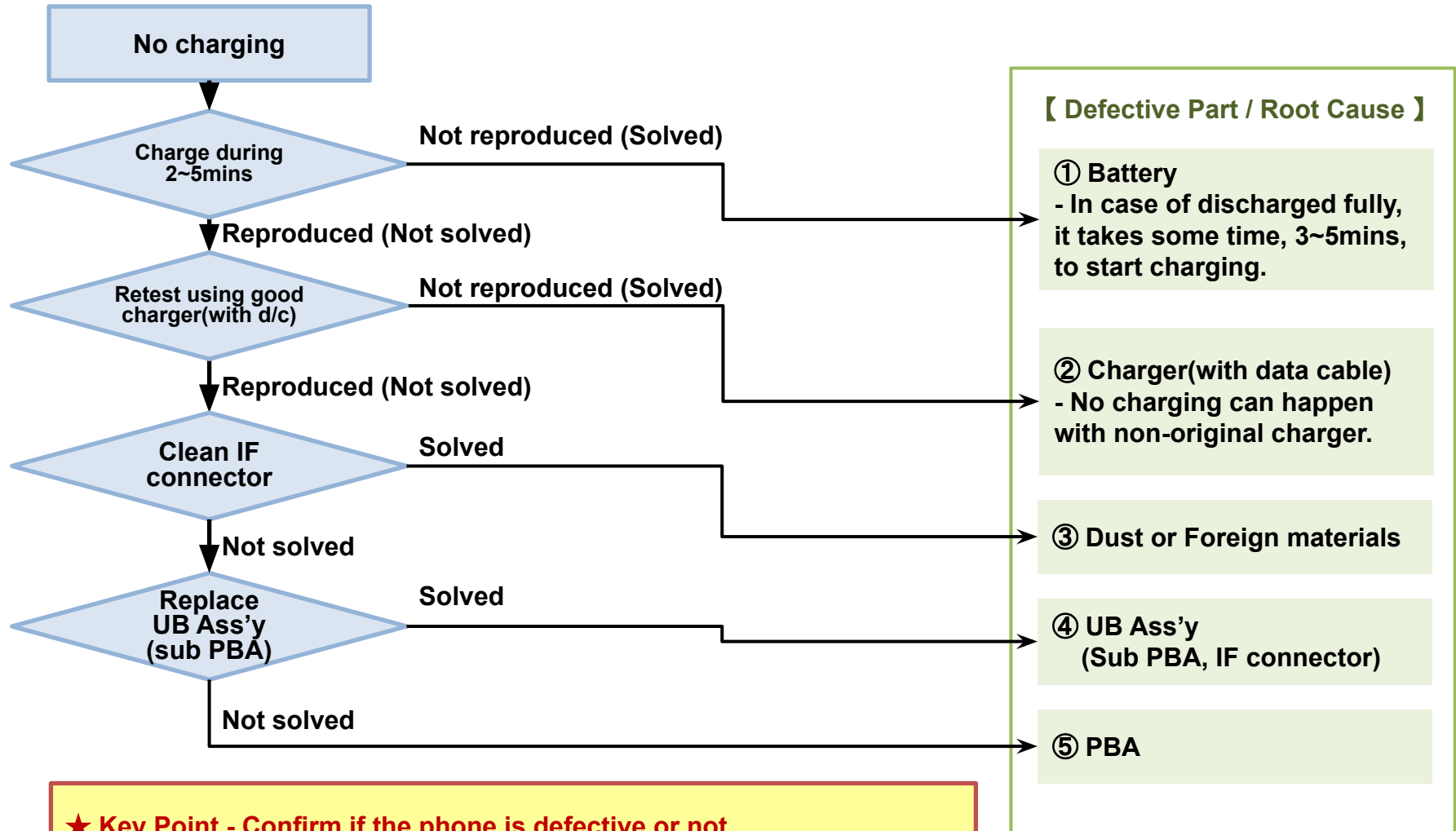
Tip 11. Sub PBA - Sub key problem

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Tip 12. Sub PBA - No charging

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★ **Key Point** - Confirm if the phone is defective or not.
For the battery and charger(with data cable) problems,
explain it to the customer using NDF Charging Guide.

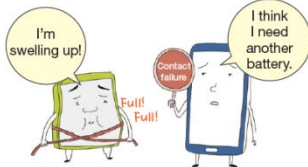
Tip 12. Sub PBA - No charging

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NDF Charging Guide !! (For more details, refer to the original guide.)

Please Check the battery

Check for battery swelling



❄️ Poor or no contact is made between the battery contacts and the device battery terminals due to the battery swelling.

3

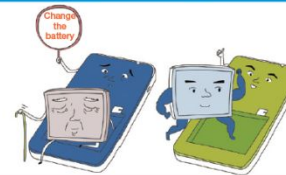
Check the battery for visible signs of damage



❄️ Outwardly visible signs of damage may indicate the presence of internal damage. Please check if there is any sign of physical damage to the battery

Please Check the battery

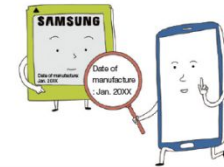
Is your Battery Old?



❄️ Over time your battery will begin to slowly but gradually lose its effectiveness as it ages. If your device has been used over a long time consider replacing your battery.

4

Check the manufacture date of the battery



❄️ Please check the manufacture date of the battery. And please change the battery if you have used it for a long time.

Please Check the battery

Check the battery terminals



❄️ If there is any foreign matter on the battery terminals, please gently wipe them clean with a soft dry cloth.

5

Ensure you use Samsung Batteries only



❄️ Should you need to replace your battery, please ensure your purchase a genuine Samsung Battery through an authorised dealer. Your device may have difficulty charging if using non genuine batteries.

Please check the charging accessories

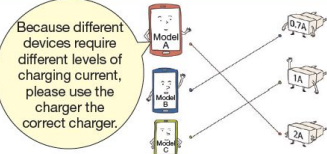
Ensure you use Genuine Samsung Chargers



❄️ Should you need to replace your Charger, please ensure you purchase a genuine Samsung Charger through an authorised dealer. Your device may have difficulty charging if using non genuine Chargers and batteries.

6

Check the charger's specifications



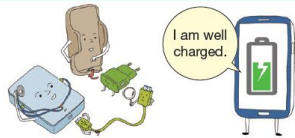
❄️ There are many available chargers to suit the requirement of different devices. (e.g. Chargers are available for current ratings between *0.7A, 1A, and 2A*. Using a charger with a rating too low for your device may result in longer charging times.

Tip 12. Sub PBA - No charging

NDF Charging Guide !! (For more details, refer to the original guide.)

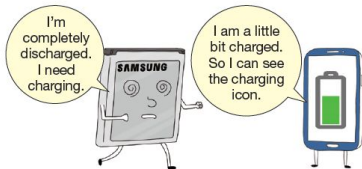
Please check the charging accessories

Check the Charger and Charging cable



Please check if there is any problem with your charger, the charging cable, and if you have one, the smart phone holder itself by using them with other devices where compatibility allows. You will be able to see if your device is charging by looking for the Charging icon on the screen.

Battery completely discharged?



If you charge the completely discharged battery, the charging icon will not be shown for at least 5 minutes after connecting your charger.

7

If you feel that the battery life is too short:

Adjust brightness



Set Brightness to be automatic or lower it.

8

Enable Power saving mode



If you enable the "Power Saving mode" you can reduce battery consumption.

If you feel that the battery life is too short:

Turn off unnecessary functions



To help conserve battery power, turn off features such as GPS, Wi-Fi and Bluetooth when not in use.

Check how often your device is set to synchronize data.

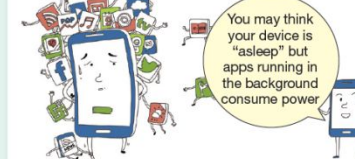


Review how often you have your device set up to sync data from your e-mail provider and Social Network sites (SNS). If you sync often then battery consumption will increase.

9

If you feel that the battery life is too short:

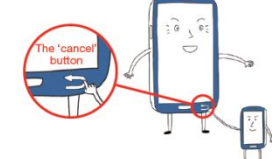
Do you have lots of apps running simultaneously?



Please use your device's Task Manager to help you find running apps so you can close or exit them. Press and hold the "Home" key to access the Task manager quickly

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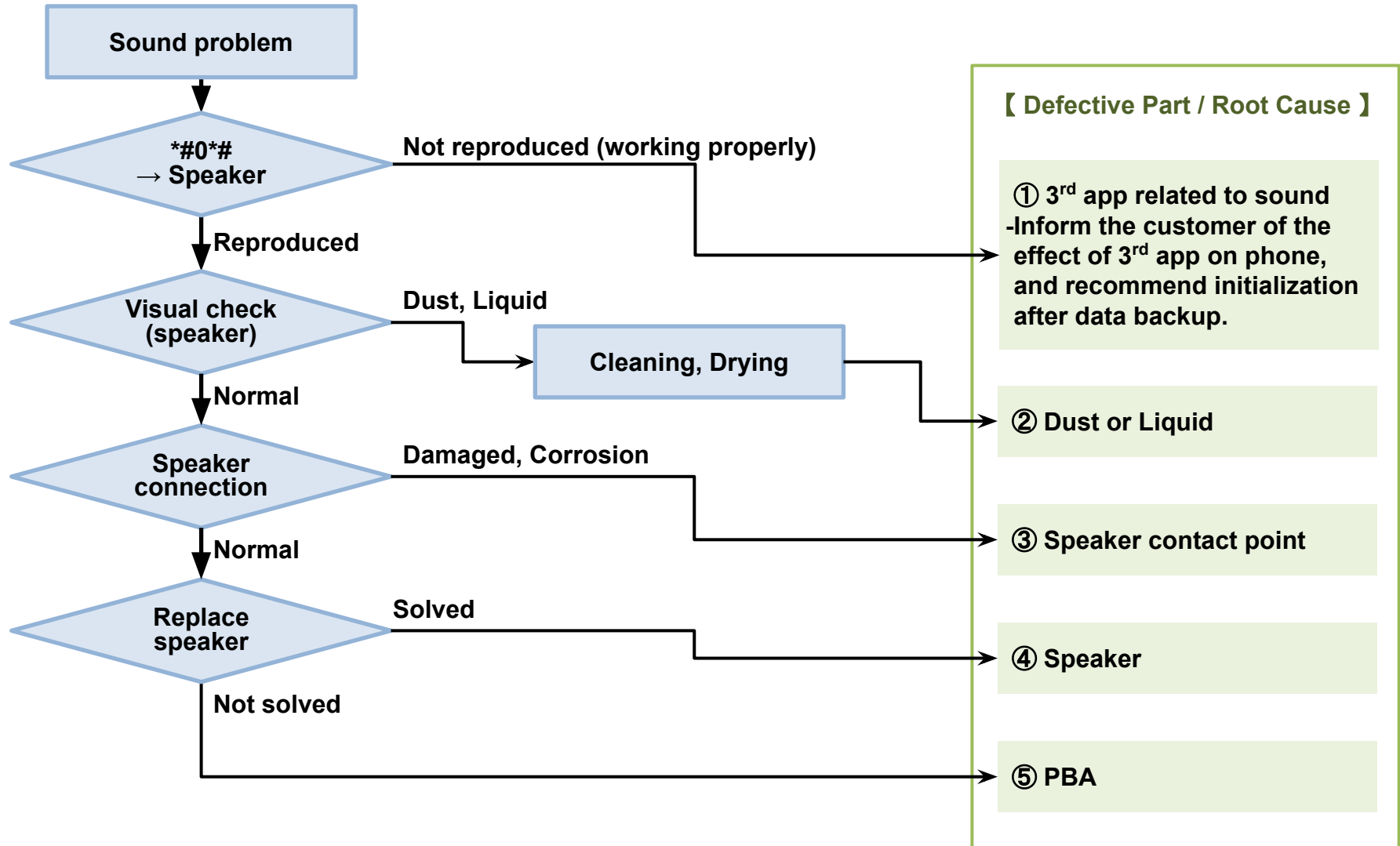
If you want to end applications, use the "cancel" (or Back) button



If you press the "Home" button, some applications may not close completely. If you want to end them, please press the "back" key to 'cancel' them.

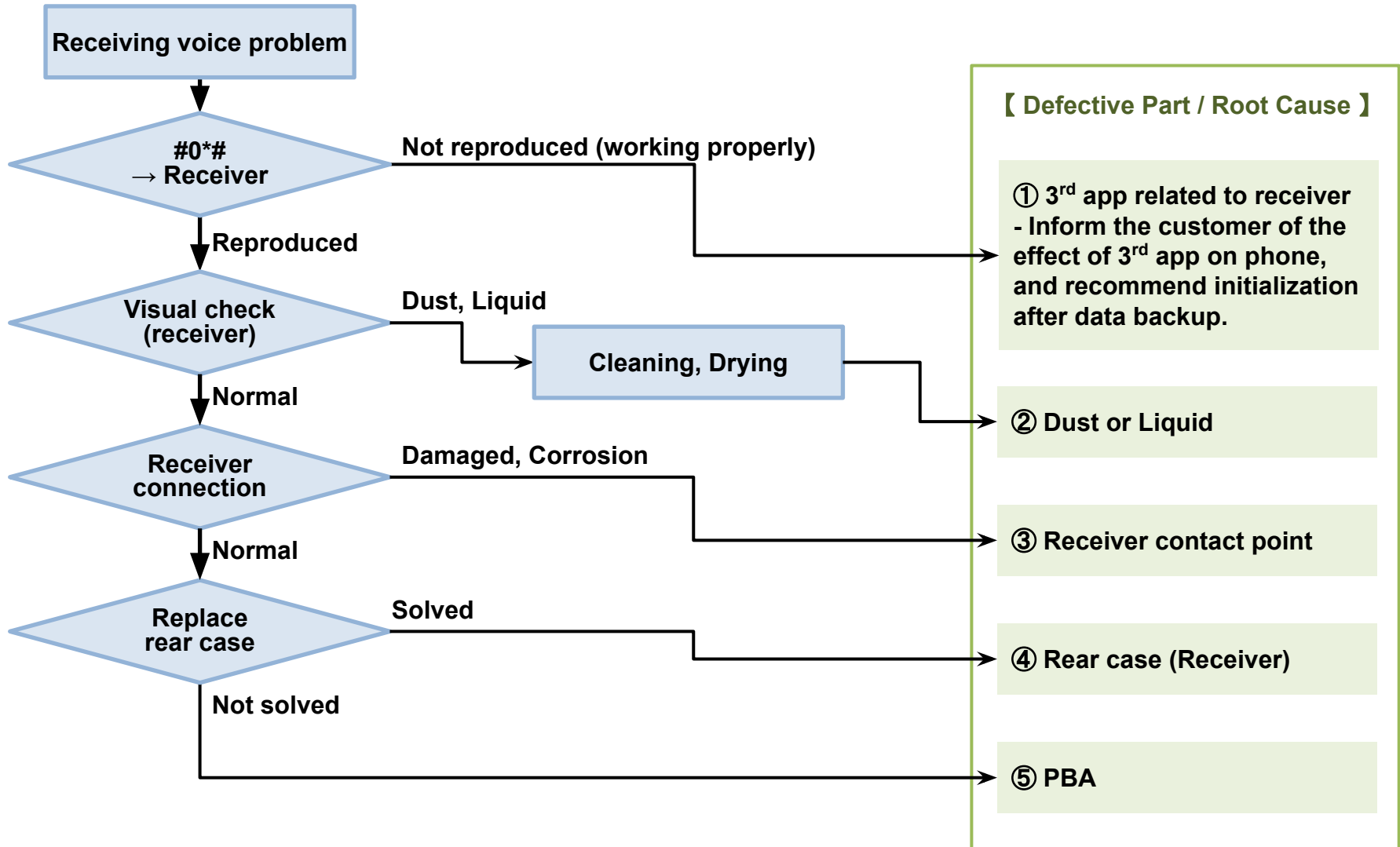
Tip 13. Speaker - Sound problem

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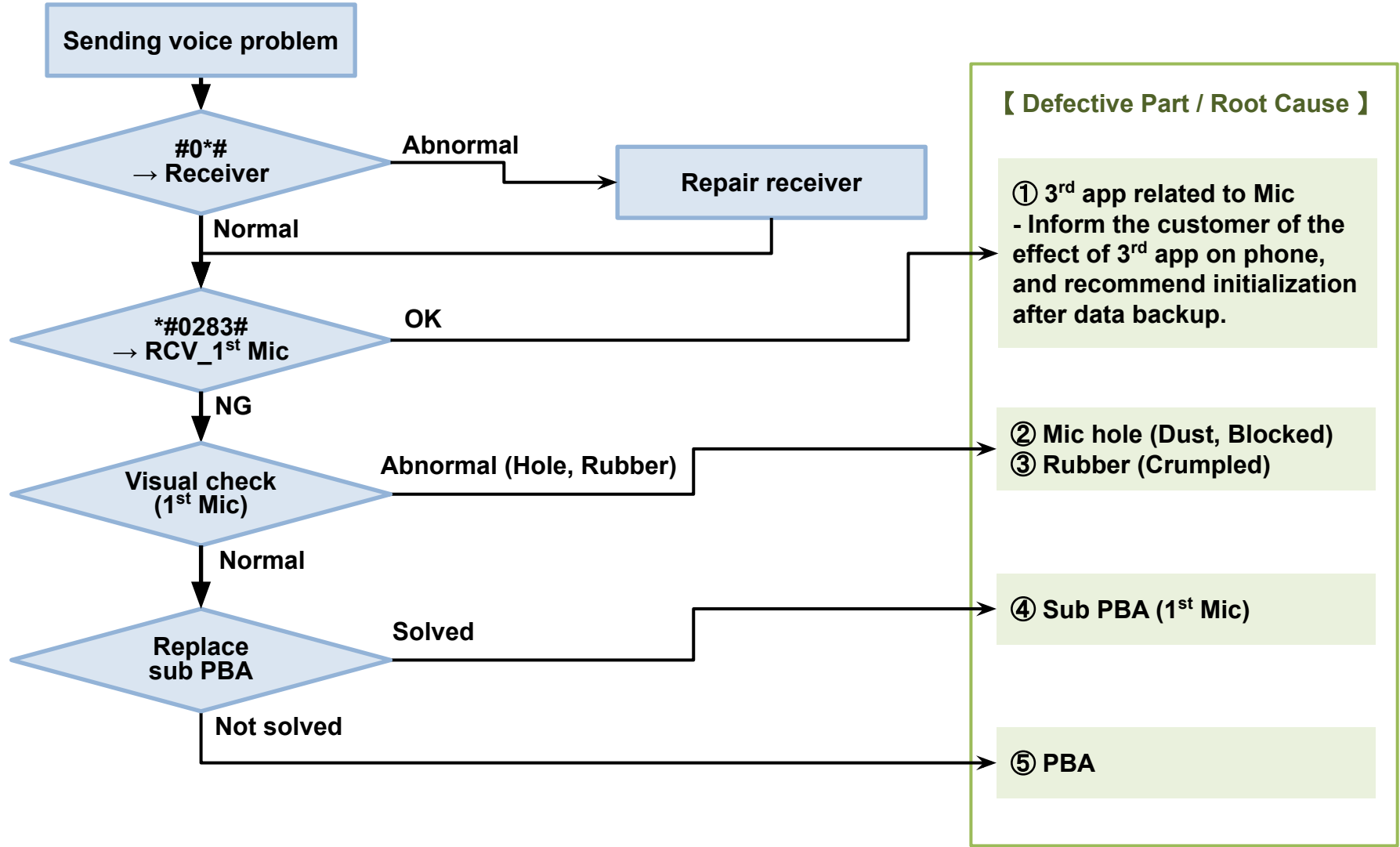


Tip 14. Receiver - Receiving voice problem

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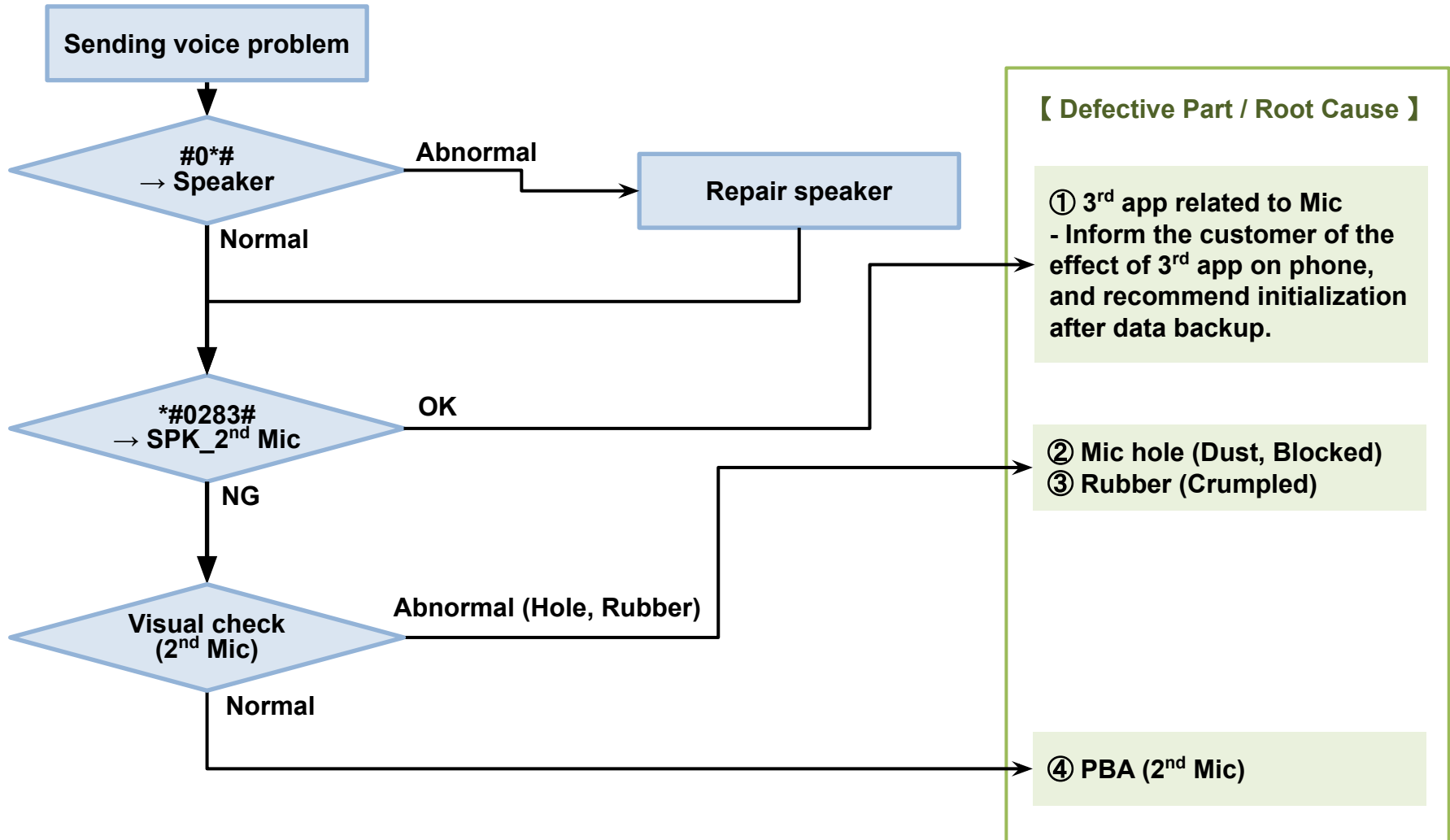


Tip 15. Mic - Sending voice problem (on receiver)



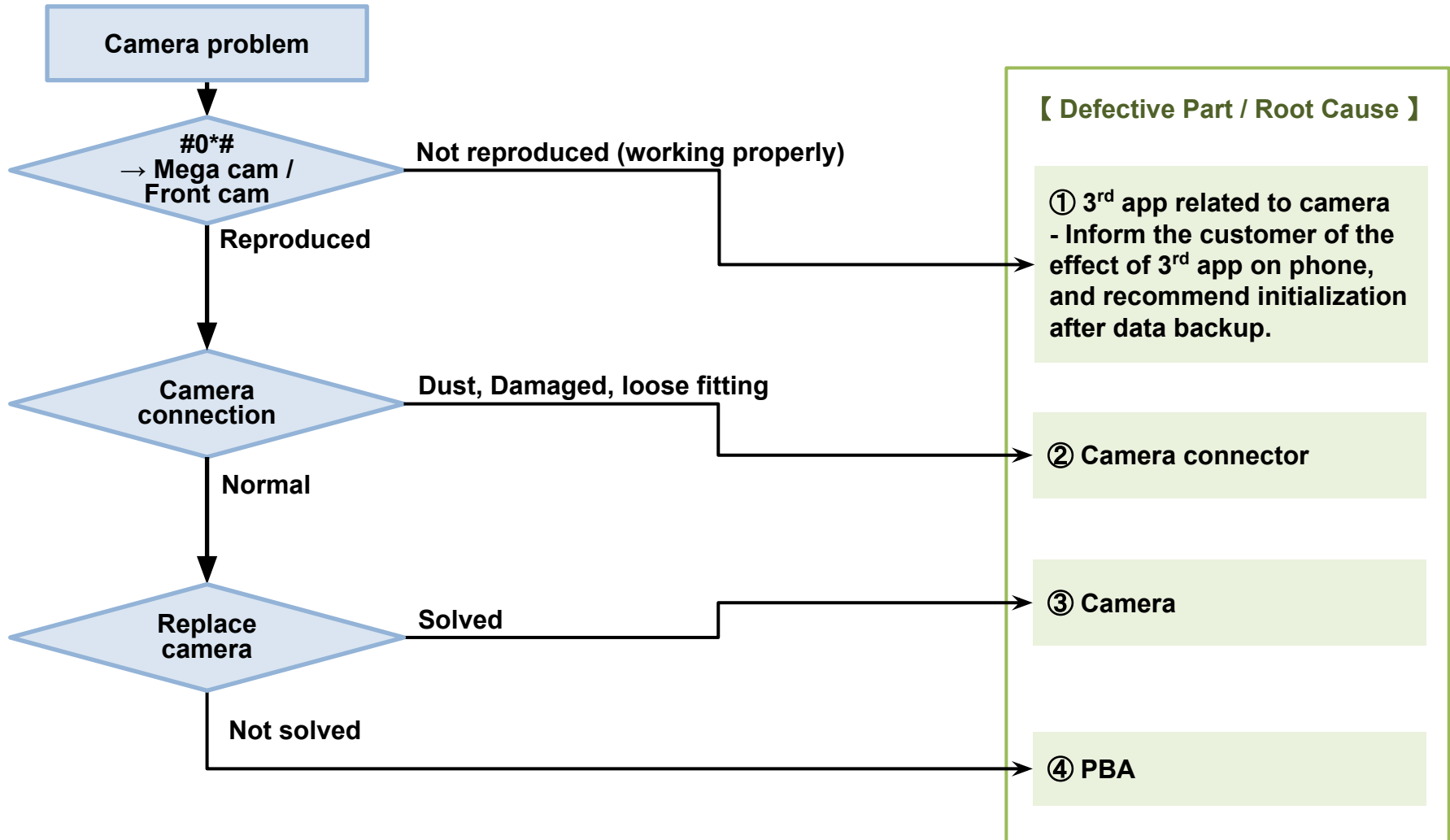
Tip 16. Mic - Sending voice problem (on speaker)

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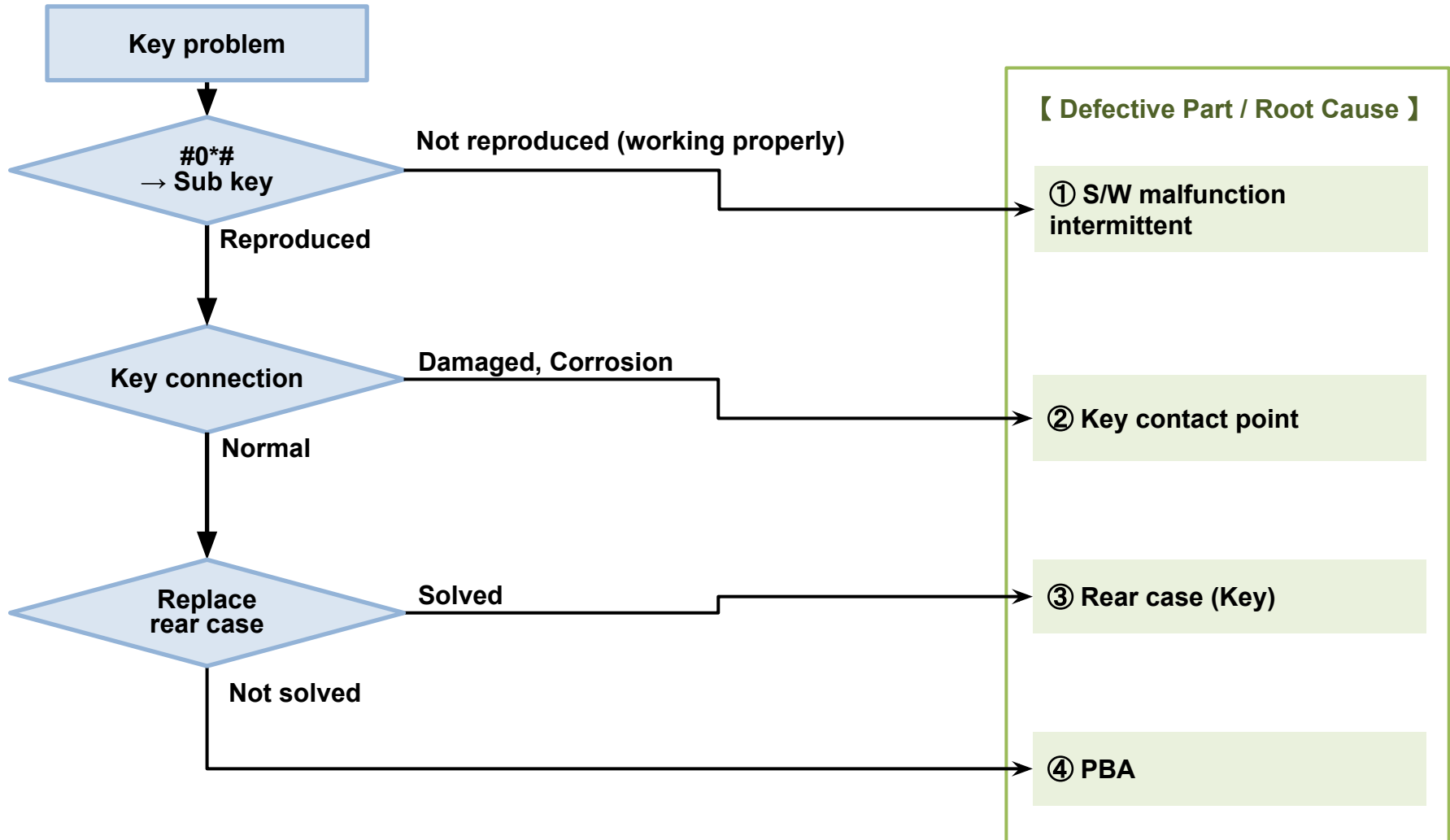
Tip 17. Camera

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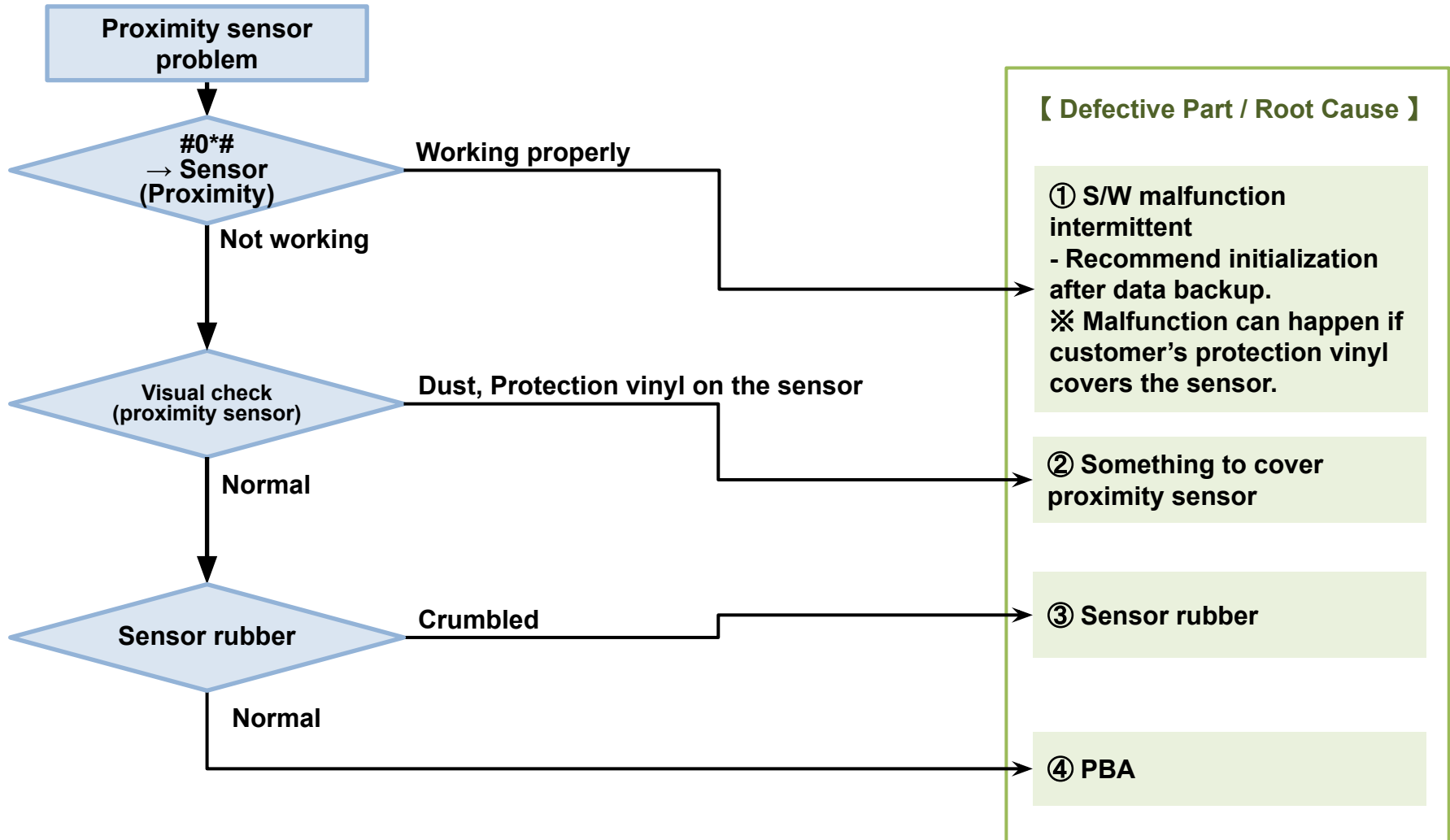
Tip 18. Keys

Rev 01



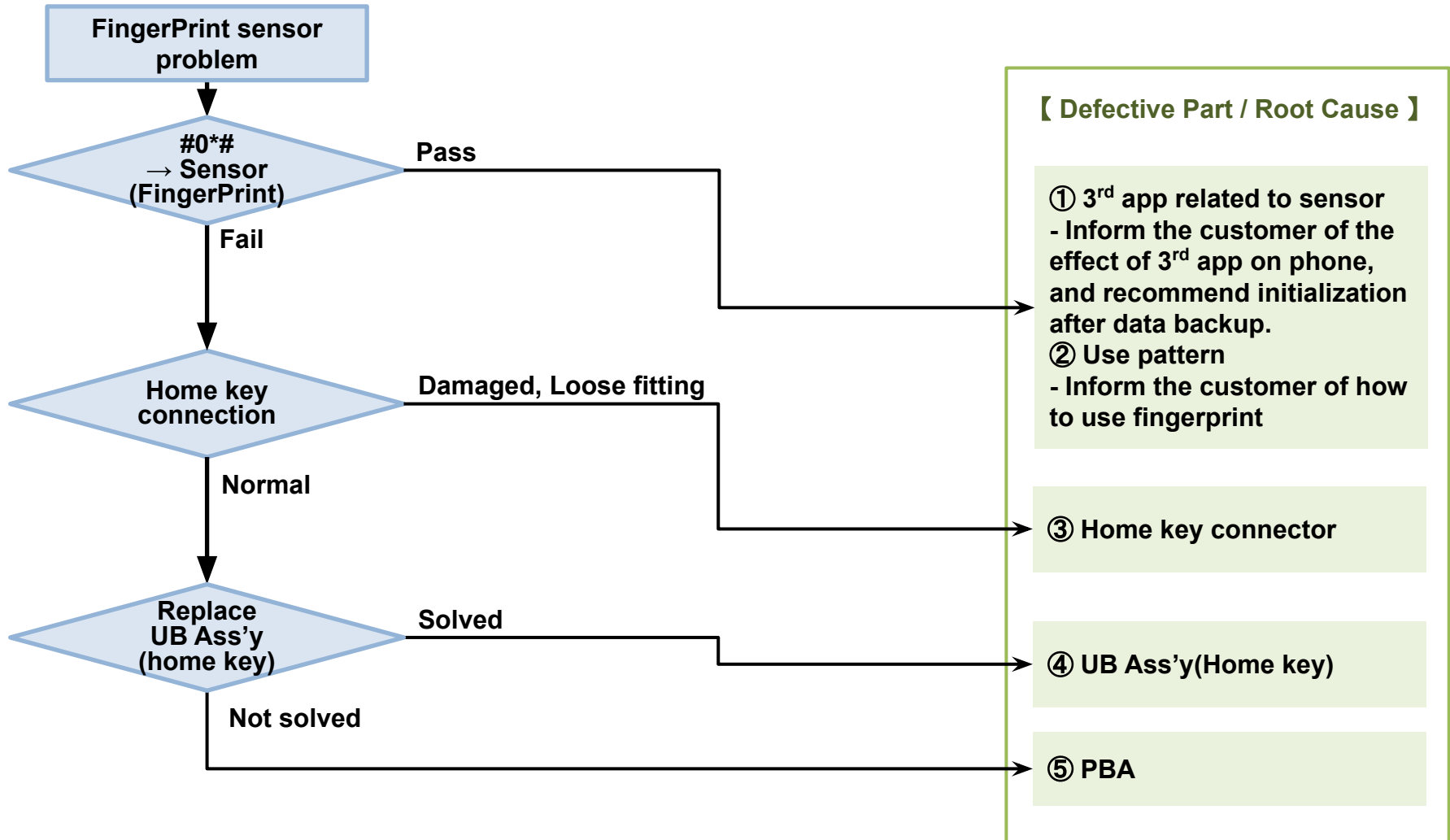
Tip 19. Sensors - Proximity

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Tip 20. Sensors - FingerPrint

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Tip 20. Sensors - FingerPrint

How to test FingerPrint sensor !!

- Test Path : *#0*# → Sensor → NormalScan on FingerPrint test menu
- Result

