G-scan3 TROUBLE SHOOTING GUIDE





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GIT-EZDS









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Power Supply Problems

5 Check the LED Illumination



G-scan3 has 2 color LEDs

When the system charges normally, the LED illuminates Red, And when it is fully charged the LED illuminates Green.

→ If power supply from the AC/DC adapter is normal but G-scan3 cannot be turned on, go to chapter 2.
 → If charging circuit is abnormal, G-scan3 will not be turned on and its LED indicator will not be illuminated although external power supply is connected.

*Note: After following the trouble shooting guide and power supply problem still exists, please contact our Head Quarter in South Korea for further assistance.



TROUBLE SHOOTING GUIDE Rechargeable Battery Chapter 2. Rechargeable Battery



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Rechargeable Battery

③ Check the battery charging circuit voltage



*When measuring the charging voltage, keep the battery connected. If Main board does not detect battery, recharging circuit is not enabled and thus, powering on and charging the battery is not available.

- →Using the Multi-meter, check the voltage of the battery charging circuit at the terminal shown above. Measure cell voltage at each same numbered pin for positive and GND
- →Normally average voltage should be around 3.7~ 4.2 V
 - The charging voltage can be as low as 3.7V when the battery is fully discharged.

→ If the charging voltage is lower than 3.7V, replace the Main Board.
→ If the battery cannot be charged, go to Step 3.

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TROUBLE SHOOTING GUIDE Communication Problems

1 Check the DLC & Adapter Cable connection





Check if all the adapters and cables are firmly connected.

- Check if the correct diagnostic adapter is connected. Do not use the Self-Test adapter for vehicle communication.
- 2. Extend the diagnostic adapter to the vehicle-side adapter and make firm connection.
- → If the communication still fails, attach the Self-Test adapter to the end of the main DLC cable and execute the Self-Test function described in step 2.





- 1. Connect the DLC main cable to the Diagnosis Scanner main body and connect the self test adapter with the AC/DC power as show in the right screen.
- 2. Press the "Start" Button to perform the function.
- 3. After completing the self test, check the result values.

Through this Step A test procedure, G-Scan3 tests the internal circuits used for the communication protocols such as ISO9141, ISO9141-2, KWP2000, Melco (Old Mitsubishi).

Circuits for CAN-Bus, J1850 (American cars in general) and some specific communication protocols are not tested, therefore passing this test without error should not be interpreted as representing that G-Scan3 is not defective.

- → If the result is "No Error found", proceed to the Step B test procedure described in step 3.
- → If the result is "Error Found", replace the VCI Board.

When VCI module is replaced, the new serial number contained in the new VCI module is copied to the main board automatically.

*Register the new serial number to SMS server and put the new serial number sticker to the base unit.





Select "Step B" from the Self-Test menu.

- 1. Extend the Self-Test adapter attached to the end of the main DLC Cable to the vehicle-side diagnostic socket.
- 2. Select Step B and click "Start" in the bottom.
- 3. Check the result.

With Step B test, each communication wire of the main DLC cable is tested to verify if there is any short or open circuit inside the cable.

- → If the result is "No Error Found", proceed to the step 4.
- → If the result is "Error Found", replace the Main DLC Cable.



FRO		DTING GU	JIDE	Communicatio	on Problems
4	Software Self T	est			
Quick	Self-Test		Detail	Self-Test	
<u>ہ</u>	Configuration	\$ <+> ₿ 90% 6:52 PM	ش	Configuration	↔ B 155.4629M
Version	Hardware Self Test		 Version 	Hardware Self Test	
🛱 Language	Start		🛱 Language	Start	
Unit Unit	Software Self Test		Unit	Software Self Test	
A User Info			R User Info		
Self Test	Quick Détail	Fix	- Self Test	Quick Detail	FIX
Data Storage Setting	Main Software	NG	Data Storage Setting	Main Software	OK
System Setting			System Setting	VOLVO	NG
- of other other of			C) byten betting	BENZ	OK
				BMW	OK
				BRILLIANCE	OK
				CHERY	OK
				CHEVROLET	OK
				0.00.00.00	

Unlike predecessors, two types of software self test is available in G-scan3.

- Quick self- test checks main software to find any corrupted data.
- Detail self-test checks all software including main software to find any corrupted data.
- 1. Select Quick or Detail button.
- 2. Press Start button to begin the test.
- 3. If NG is displayed, press red colored Fix button.
- 4. Pressing Fix button will move to software update menu.
- 5. The software that contains corrupted data is automatically selected.
- 6. Begin software update.
- 7. Perform software self test again to see if the problem persists.
- ➔ If communication is OK after software update, it was the software causing communication problem.
- → If the communication problem persists, go to step 5.

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TROUBLE SHOOTING GUIDE Communicat

Communication Problems

(5) How to use log capture function

- 1. Turn on G-scan3
- 2. Connect G-scan3 to the vehicle.
- 3. Select car maker
- 4. Press the [Log Data] and [Log Start] button
- 5. Press [OK] button, then data logging will begin.

In order to regenerate the failure, please repeat the same function that has been selected. You can see the "Recording" icon appear in the top of the screen indicating that the data transmission is being recorded.

6. When data logging is completed, press [Log Data] button in the bottom once again and then select [Log Stop]. When you press [Ok] button, then file saving screen will appear. And you will be able to input the following information.

[Error Types] : You can select error types

[Error Path] : Procedure of vehicle selection

[Symptoms] : You can write the details about the symptom of problems

[File Name] : The file name will be automatically made or you can customize the file names. [Customer e-mail] : You are able to write your e-mail address or the e-mail address saved on the User info. In the configuration is linked automatically.

How to send the log data to EZDS?



Conclusion

- Misuse on menu selection → Explain to customers.
- New car, not supported car, S/W Bug → Send patch within 48 hours
- No answer → Vehicle ECU system malfunction.

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Chapter 4. LCD Problems

LCD Problems





< LCD related problem symptoms >

Various symptoms of LCD related problems can be experienced. Identify the problem among the following categories and follow the trouble shooting procedures provided.

1. Back light problems

- LCD back light does not come on.
- LCD back light is too dim or display is too dark.
- LCD brightness is not controllable.

2. Touch screen is not responding.

- G-scan3 is not responding to a screen touch.

3. Touch screen response is delayed.

- G-scan3's touch screen does not respond instantly.

4. Dead pixels are found

- Colored or dark spots remain unchanged.

5. Display noise and broken characters

- Screen is illegible due to display problems like dots, lines, patterns.
- Unknown strange characters or symbols appear instead of normal alphabet or local language characters.

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LCD Problems







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LCD Back Light Problem (Replacing Front Case)

If the brightness is not adjustable, Backlight Control Board of the LCD might be a problem. Disassemble the front case and replace the LCD module (Refer Part Replacement Manual)



Front Case





You can see the Kapton tape is attached on the control board. Kapton tape can be re-attached after replacing the LCD.



- Turn on the power before assembly and check the LCD screen operation.
- Wear gloves as necessary during disassembly and assembly.



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LCD Problems



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- 1. Check if the protection film is on the LCD screen. If so, remove it from the screen and inspect the LCD screen again.
- \rightarrow If problem persists, go to Step 2.
- G-scan3 automatically performs screen calibration.
- Separate calibration is not required.





Supported API: 3

Android Recovery

Press any key to continue.

(2)

Se perderán todos los datos. la configuración de fábrica.

Key Operation

Menu Select

re No Cancel (b) ←	FI		Factory Reset
	(FZ)	•	Cancel

- * Android Recovery will re-install O/S and remove all saved data.
- * Make sure to move saved files to separate storage device before performing this function.

(2)

- 1. Make sure to connect external power supply.
- 2. Press F1 & F2 button to move up or down and perform Android Recovery function.
- 3. After Android Recovery is completed, re-enter User Info. in configuration and reset.
- 4. If response is still delayed, turn G-scan3 on by pressing POWER button while holding down F1 button. All data will be removed, keep charging during Factory reset
- ➔ If the problem is not fixed, go to Step 3.





- 1. Remove Front case referring to Part Replacement Manual
- 2. Make sure that lines on LCD F-PCB cable and Touch F-PCB cable is aligned as shown above.
- 3. Remove and clean F-PCB contact area.
- 4. Try to turn the power ON and check the LCD operation before assembling the unit.
- * Replace F-PCB and if the problem persists, replace the LCD module.



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 \rightarrow It occurs due to hardware problem. VCI board needs to be replaced.

When VCI module is replaced, the new serial number contained in the new VCI module is copied to the main board automatically.

Register the new serial number to SMS server and put the new serial number sticker to the base unit.



G-Scan3 System Lock

② "Anti-Reverse Engineering" Lock

For the protection of GIT's proprietary right and intellectual property that are embodied to G-scan3, the product contains the "Anti-reverse Engineering" function.

Executing a particular special function repeatedly more than 20 times without resetting communication with the control unit by returning to the upper level menu, which is not supposed to take place under the normal conditions, will be considered as an attempt to reverse engineer the G-scan3.

Once prompted by this warning message, please stop using the same function with the G-scan3, turn it off immediately and then restart. The internal counter will be reset and the warning message will not appear unless the condition is fulfilled again.

Despite such warning, if it is ignored and the function is used a couple of times more, G-scan3 finally locks up and ceases to operate normal as shown below.

If G-scan3 is locked, it is not recoverable unless the G-scan3 base unit is returned to the authorized local distributor.

G-scan3 needs to be examined and then unlocked by inputting the unlock code which is provided by EZDS HQ in Korea. The process is not subject to warranty service.

G	G-scan	z⊂(S) Diagnosis ×	
C	This G-scan is loc Contact your distr Type in the Input (ked for suspected abuse. ibutor and provide the Dealer Code below to generate the Input Code. Code below to unlock it.	
U Utili			
🖒 Fave	Dealer Code	cpa4 4u8H bPCh pQ	
🕮 Use	Input Code		
ැූි Con	input Code	<u></u>	
J J25		Diagnostic Repor	t >
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G-Scan3 System Lock

③ "Anti-Reverse Engineering" Lock 2

G-scan3 will be completely locked when it has detected clear evidence that the user was trying to extract information from the tool. Please do not accept this unit for any service. The user needs to contact GIT directly.







According to the user license agreement, a G-scan3 must be used in the region where it was originally shipped to, and actual use of the product is monitored to make sure that this user license is not violated.

G-scan 3 will be locked down if it is found to have been used outside of designated country or if the device does not access to EZDS server through the internet for more than 90 days. In case of no access to the server for 90 days, G-scan3 displays notification message 10 days before it is finally locked down as shown above. Once G-scan3 is online and access to the server is checked, the system lock-down warning will be removed.

Once G-scan3 gets locked down for the violation of the user license agreement, the input code must be entered in order to unlock the G-scan3.

Contact EZDS manager in charge of your region immediately and provide the complete and detailed report including the description of the situation, serial number and customer information in order to receive the Input code. The process may require remote access to the device for analysis.

EZDS will decide whether or not to provide the unlock code case by case based on the provided information and the result of remote analysis, and be reminded that EZDS holds the right to refuse the provision of the unblock code if the product is locked as the result of border-crossing sales activities or caused damage to the business of the other distributor(s). No service related with unlocking the device is subject to warranty.

After G-scan3 is locked, input code must be entered in order to use G-scan3. Complete and detailed report including country, serial number and customer information must be provided to EZDS in order to receive the Input code. EZDS will determine to provide input code or not.



TROUBLE SHOOTING GUIDE Keypad Problems Chapter 6. Keypad Problems

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- 1. Press the Power button and see if the G-scan3 is turned On or Off
- 2. Go to Android setting and Sound & notification, press F1 or F2 button to check for proper button operation.

*Check if all the button keys are pressed with same pressure. → If buttons are not operating normally, go to step 2.



② Check & Replace the VCI board PCB and Cable



- 1. Remove Front case.
- 2. Check for firm connection of the keypad control board cable as shown above image.
- → Remove and inspect connector. After inspection, re install the connector.
- ➔ Check if G-Scan3 is responding normally and if the same symptom appears, replace the 24 cable.



Keypad Problems

Wi-Fi Problems

Chapter 7. Wireless function related Problems

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- 1. Switched on the Wi-Fi & Bluetooth
- 2. Check the Wi-Fi & Bluetooth signals sensitivity.
- Check network condition of the internet router or Bluetooth device connected with G-scan3. 3.
- 4. Check whether Wi-Fi networks or Bluetooth around you are normally searched when click Refresh.
- 5. If the Wi-Fi & Bluetooth signals sensitivity or Refresh does not work well, do Power reset and recheck.
- → If signal status is normal, proceed to the next step.

② Check the antenna connection

- 1. Remove Front case.
- 2. Check connection for Antenna connector.

3. If antenna connection is ok, replace antenna. (Replace after removing housing from the main board.)

→ If the problem persists after replacing the antenna, replace the main board.

Wi-Fi Problems

Chapter 8. Camera & Flash Light Problems

Camera Problems

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2. If the camera application is not running, inspect for flash light operation as shown above right picture.

•If flash light is not working properly, camera function will not be running.

- 3. If camera is not operating properly, go to step 3.
- → If camera focus/ resolution is malfunctioning, go to step 2.

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- 1. Run the Camera application.
- 2. Touch the object to adjust focus.
- \rightarrow If focus is not working properly, go to step 3.

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- 1. Remove front case referring to Part Replacement Manual
- 2. Check the Camera & Flash light connection
- 3. If connection is normal, replace camera module or flash light module.
- → If problem persists after replacing camera and flash light module, replace main board.

Check the Camera & Flash light

- 1. Disconnect Camera/Flash module connector and remove main board.
- 2. Remove Two screws pointed in picture no.1. Then flash light will be removed as shown in picture no.2.
- 3. Replace F-PCB cable carefully. Be extremely careful not to crack the cable.
- → If problem persists after replacing camera/flash module, replace the main board.

Camera Problems

(4)

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G-scan 3

LAN (Ethernet)

- 1. Perform visual inspection in LAN socket for damage.
- 2. Check if the LED light located at the top is illuminating after connecting LAN wire.
- 3. Check if G-scan3 is connected to internet.

(Check for Internet icon located at the top of the screen or go to settings-more-Ethernet)

→ If internet connection cannot be made, replace the main board.

HDMI

- 1. Perform visual inspection in HDMI socket for damage.
- 2. Check if the connected monitor displays the G-scan3 screen after connecting HDMI cable.
- 3. If the screen is not displayed, try with another cable.
- → If problem persists, replace main board.

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TROUBLE SHOOTING GUIDE

Audio Problems

Chapter 7. AUDIO problem

MIC

- 1. Go to Settings and adjust media volume to its maximum level.
- 2. Perform Sound record.
- 3. Play the recorded file. (Same for video)

Speaker

- 1. Go to Settings and adjust media volume to its maximum level.
- 2. Play the recorded file or media.
- → If audio for recorded file or clip is not working, go to step 2.

- 1. Perform visual inspection in LAN socket for damage.
- 2. Check if the LED light at the top is illuminating after connecting LAN wire.
- 3. Check if G-scan3 is connected to internet.

(Check for Internet icon located at the top of the screen or go to settings-more-Ethernet)

→ If internet connection cannot be made, replace the main board.

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