

SERVICE BULLETIN

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### DISPLAY CONTROL UNIT REPLACEMENT

This bulletin has been amended. Modifications have been made to include 2017 Q50, Q50 Hybrid, Q60, QX30, QX60 and QX60 Hybrid vehicles. No other changes have been made. Please discard all previous versions of this bulletin.

#### **APPLIED VEHICLES:**

2014-2017 Q50 and Q50 Hybrid (V37) 2017 QX60 and QX60 Hybrid (L50) 2017 QX30 (H15) 2017 Q60 (V37)

#### SERVICE INFORMATION

If the Display Control Unit (DCU) needs to be replaced on an Applied Vehicle for any reason, follow the steps in the Service Procedure to:

- Confirm proper diagnosis and repair with TECH LINE to obtain DCU order approval, then place the order with DENSO.
- Configure the Multi AV system.
- 2014-2016 Q50 and 2017 QX30 vehicles <u>only</u>: Register the replacement DCU. DCU registration is necessary whether or not the vehicle has an active Infiniti InTouch Apps subscription.



NOTE: The original DCU must be installed in the vehicle while performing part of this procedure. <u>DO NOT remove the original DCU until instructed.</u>

Infiniti Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. NOTE: If you believe that a described condition may apply to a particular vehicle, DO NOT assume that it does. See your Infiniti retailer to determine if this applies to your vehicle.

#### SERVICE PROCEDURE

Before starting, make sure your ASIST has been synchronized to the current date and all CONSULT-III plus (C-III plus) upgrades have been installed.

#### Parts of the Procedure

- PART 1: Confirm Proper Diagnosis and Repair with TECH LINE to Obtain Display Control Unit Order Approval, Then Place the Order with DENSO
- PART 2: Record Multi AV Configuration Values of Original Display Control Unit; Replace Display Control Unit
- PART 3: Configure the Multi AV System
- PART 4: Manually Configure the Multi AV System (if needed)
- PART 5: 2014-2016 Q50 and 2017 QX30 Vehicles Only: Register the Replacement Display Control Unit
- PART 6: <u>2014 Q50 Vehicles Only</u>: Check the Software Version, Confirm it is the Newest Version, Then Update If Needed

#### PART 1:

## Confirm Proper Diagnosis and Repair with TECH LINE to Obtain Display Control Unit Order Approval, Then Place the Order with DENSO

To improve customer satisfaction by providing the correct repair on the first visit, Infiniti has put in place a procedure for ordering an "exchange" or "new" DCU.

- To ensure a proper diagnosis and repair, the technician will need to call TECH LINE to confirm (or assist with) their diagnosis and the proper repair prior to ordering the DCU.
- DENSO will require a confirmation from TECH LINE prior to shipping an exchange DCU.
- New DCUs will be put on **parts restriction** and will need to be cleared prior to the order shipping. In the event that a new DCU is required, the warranty claims call center will verify that TECH LINE has recommended replacement.
- This process applies to vehicles equipped with a Navigation system as well as non-Navigation vehicles.
- TECH LINE has the support of engineering and DENSO in diagnosis, if needed.
- Most DCUs ordered should be an exchange unit versus a new unit.

The requirement of calling TECH LINE for confirmation to replace a DCU will be monitored to ensure the most effective and accurate method of repair. Future changes or adjustments may be made to this process to increase repair timeliness and/or customer satisfaction.

#### A new DCU is required only if:

- The vehicle has not yet been sold.
- The customer requests a new DCU on a non-warranty repair.
- The exchange DCU is not available.
- Insurance claim replacement.

**NOTE:** Infiniti also recommends using this procedure for non-warranty repairs to ensure that proper diagnosis and repair is performed.

#### Contact TECH LINE to Confirm DCU Replacement is Needed

**NOTE**: Contacting TECH LINE is done to confirm diagnosis. An exchange DCU must be ordered by your parts department directly from DENSO. See <u>Order an Exchange DCU Form DENSO</u> below.

- 1. Duplicate and verify the customer's concern if possible. If duplication is not possible, gather as much information about the issue as possible from the service advisor/writer or customer.
- 2. Check for any connected devices (phone, iPod, MP3 player, etc.) or determine if a connected device is present during the concern. Gather model and software version information if possible.
- 3. Call TECH LINE, <u>after</u> gathering preliminary information of the concern. After a diagnosis of the concern has been performed, and the technician and TECH LINE agree that the DCU should be replaced, go to step 4.
- 4. Provide the following information to TECH LINE:

DCU part number
<b>NOTE:</b> The DCU part number can be found on the label on the back of the DCU, or with CONSULT-III plus by going to Diagnosis (One System) > MULTI AV > ECU Identification.
Is the vehicle equipped with a Navigation System?
Dealer name and fax number
Dealer contact name

5. <u>TECH LINE</u> will confirm with DENSO, by email, that the diagnosis has occurred and a DCU replacement is approved.

**NOTE:** TECH LINE <u>does not</u> send an email or fax to your parts department.

#### Order an Exchange DCU From DENSO

- 6. After steps 1-5 have been completed, <u>your parts department</u> will order the replacement exchange DCU as follows:
  - a. Fill out the Exchange Order Form and fax or email it to <u>DENSO</u>.

Order forms are found on nnanet.com:

- a. Log onto NNAnet.com.
- b. Confirm Brand View is Infiniti.
- c. Select Workspace.
- d. In the Warranty section, select Electronic Exchange Information.
- b. <u>After</u> the order is submitted, <u>and after</u> TECHLINE has submitted authorization by email, <u>then</u> DENSO will fax the confirmation form back to your parts department.

**NOTE:** If you are logged on to nnanet.com, clicking on this link will take you directly to the form.

https://www.nnanet.com/wps/myportal/DPInfinitiElectronicExchangeInformation

- 7. Prepare the vehicle:
  - Make sure the shift selector is in Park, and the parking brake is set.
  - Connect the GR8 to the 12V battery and select ECM Power Supply Mode.
  - Connect the C-III plus VI to the vehicle
  - Launch C-III plus on the CONSULT PC.
  - Turn the ignition ON:

For Q50, Q60, QX30 and QX60 vehicles

Cycle the ignition to ON. **DO NOT** start the engine.

For Q50 Hybrid and QX60 Hybrid vehicles

Cycle the ignition to ON. **DO NOT** cycle to Ready Mode.

8. Select Re/programming Configuration.

CONSU	ILT-III plus Ver.V11.	10.00 VIN:-	Vehicle : -		Country : U.S.A.	
<b>H</b> Back	Home Print S	Screen Capture Mode	Recorded Help 12.		-	
Conne	ction Status		Diagnosis Menu		,	
	Serial No.	Status	Diagnosis	(One Syster	m)	
VI	2300090	Normal Mode/Wireless connection	Diagnosis	(All System	IS]	
м	-	No connection	Re/program	nming, Con	figuration	1Step
80	Select VI/MI			r		
Applicat	tion Setting Sub mode	Language Setting	Maintenan	ce		
<b>7</b>	VDR		]			
1		F	igure 1			1

9. Read the Precautions.

When finished, touch the "Confirmed instructions" box to insert a check mark, then select **Next**.

CONSULT-III plus Ver.CSP16.20	VIN:- Vehicle	et -	Country : U.S.A.
Back Home Print Screen	een ture Mode Recorded Help	13.4V VI MI	-
Configuration	Precaution	Vehicle Selection	
Precaution			
Operating suggestions for reprogramm Please review the all of precautions, an touch "Next".	ing, programming and C/U configratio d click the "Confirm" check box after c	in: onfirming the its points. And	
Precautions			
Caution:	d		
2. "Back" and "Home" button may not	be used on this flow.		
For reprogramming and programming 1. Install the latest version of the CONS CONSULT-11 plus PC. 2. Preparation and read the service ma For ECU Configuration 1. Need to write the guration data 2. If writing the wr_roonfiguration data For ECU Copthon using manual	ULT-III plus sortware, reprogramming/p inual or reprogramming procedure she to new ECU, after replace it. ta, ECU can not work. Please write the mode	programming data to this let. I right data.	
1. Confirm the nicle's spec and its co configure thata, ECU can not work. 2. Open saving completely. Do no	nfiguration spec, following the service Please write the right data. It abort without saving data.	Step	Next
Confirmed instructions			

Figure 2

10. Select the Manual Selection (Vehicle Name) tab, then select the applicable Model and Year.

**NOTE:** If the screen shown in Figure 3 does not display, proceed to step 12.

11. Select Select.

Home **O** Help 12.1V Back Print Scree X Re/programming, ◀ Vehicle Confirmation Automatic Selection(VIN) 6 Manual Selection(Vehicle Na Model Year /ehicle Name NISSAN \*INFINITI EX35 Camp:P8202 INFINITI M35h 2014 INFINITI EX35 INFINITI M37/M56 INFINITI INFINITI FX35/FX50 INFINITI QX5 Step INFINITI G25/G37 Sedan 10 INITI Q50 S INFINITI G35 Sedan INFINITI G37 Convertible INFINITI G37 Coupe CLEAR INFINITI G37 Sedar Step INFINITI M35/M45 11 1/1 Figure 3



When finished, select Confirm.

Model Year are displayed.



Figure 4

# Steps 13 and 14 below apply to 2017 QX30 vehicles ONLY. For all other vehicles, proceed to step 15 on page 7.

13. Select USA/CANADA Dealers in the drop down menu, then select OK.

#### NOTE:

- The screen in Figure 5 will only appear during the first login on a CONSULT PC. Future logins with same CONSULT PC will display the screen in Figure 6 only.
- If the screen shown in Figure 5 does not display, proceed to step 14.



Figure 5



Figure 6

14. Enter your NNAnet.com Username & Password, then select Submit.

15. After system call completes, confirm the correct VIN is displayed.

When finished, select Confirm.

**NOTE:** If the VIN displayed is incorrect, input the correct VIN. When finished, select **Confirm**.

CONSULT-III plus Ver.V11.10.00			Country : U.S.A.
Back Recorded Print Screen Screen Massacrost Data	12.1V		
Re/programming. Vehicle Confirmation	System S	election	4/6
nput VIN			
Enter the VIN number, and touch "Confirm". According to this operation, in case of specified operation that requires to sav CONSULT, VIN number you input is saved as file name. Therefore, confirm VIN	e ECU information I number correctly.	into	
			_
		-	
	Step		
	15	F	Confirm

Figure 7

- 16. Select MULTI AV.
  - Use the scroll arrow if needed.

Ver.CS	SP19.10			States		
Back Home Print	t Screen Capture Mode	Recorded He	9 13.2V	🖬 🗙 🖿 🔜 🔀		
Diagnosis (One System) System Selection						
NISSAN/INFIN	NISSAN/INFINITI Renault X-Badge					
Group	Alls	systems	-			
ENGINE	TRANSMISSION		Step	DIU		
ABS			16	AUTO SLIDE DOOR		
METER/M&A	EHS/PKB	CON	/ERTIBLE ROOF	PRECRASH SEATBELT		
ВСМ	MOTOR CONTRO	DL HEAD	LAMP LEVELIZER	AUTO DRIVE POS.		
AIR BAG	EPS/DAST 3		e-4WD	ALL MODE AWD/4WD		
ICC/ADAS	IPDM E/R		ASER/RADAR	DIFF LOCK		
HVAC			ELLIGENT KEY	4WAS(MAIN)/RAS/HICAS		
	1/3					
	F	-!				

Figure 8

17. Select Before ECU Replacement.



Figure 9

- 18. Confirm current configuration and write it down.
  - Configuration can also be printed with the **Print Screen** button or **Screen Capture** button.
  - Use the scroll arrow if more than one page of information is available.

**NOTE:** Configurable options will differ between models. Your screen may look different.

19. Select Save.

NOTE: If the configuration data cannot be saved, replace the DCU as instructed in the applicable Electronic Service Manual (ESM) and then proceed to PART 4: Manually Configure the Multi AV System (if needed) on page 10 of this bulletin.

13.2V VI Recorded B Print Screen **e** Back 1 × Re/programming, Configuration 4 Save ECU Data Write down / print this The current vehicle specification information. In case of no items listed below, e this information DESTINATION United States NAVIGATION WITH LDP (LANE DEPARTURE PREVENTION) On HYBRID FR TYPE 4WD Print CAMERA SYSTEM NONE/AVM ph3 PREDICTIVE COURSE LINE WITHOUT 1/2 Figure 10 Step 19

CONSULT-III plus Ver.CSP19.10		Country : United States
Back Home Print Screen	en re Messarement Mode Recorded Data	-
Configuration	Confirmation of Replace ECU Save ECU Data	8/8
ave ECU Data		
After replacement of ECU, touch "Config	urration" on Home Screen to continue to write configuration.	
File Label	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
Vehicle	XXMENNERSEXX	_
Vehicle System	XXNRNRRRXX MULTI AV	_
Vehicle System Type ID	XXIMEINEXXXSS6xxx MULTI AV XX20000XXXH90XX	-
Vehicle System Type ID Saved Date	xxINEXNERGERxx   MULTI AV   XXXHERMER   6/25/2013 10:24:44 AM	-

Figure 11

20. Select End.

- 21. Replace the DCU Unit as instructed in the applicable ESM.
  - Refer to section AV > DISPLAY CONTROL UNIT > Removal and Installation.

- 22. Perform steps 7-17.
- 23. When you get to the screen shown in Figure 12, select **Confirm**.



24. Select After ECU Replacement.



Figure 13

25. Select OK.

#### After performing step 25

If an error message does not display:

• Proceed to step 39 on page 14.

If an error message <u>does</u> display:

 Proceed to PART 4: Manually Configure the Multi AV System (if needed), below.

G CONSULT-III plus Ver.31.21 Ver.CSP19.10	Country : United States				
Back Records	d Pep Pil X P P P				
Re/programming, Confirmation of Replace ECU	te Configuration Print Result / Operation Complete 6/7				
Write Configuration					
Following setting value for each item are saved to vehicle ECU. Confirm setting value for each items, if OK, touch "OK" to save them to vehicle ECU.					
Rems	Setting Value				
DESTINATION	United States				
NAVIGATION	WITH				
LDP (LANE DEPARTURE PREVENTION)	On				
HYBRID Off					
CAMERA SYSTEM NONE/AVM ph3					
PREDICTIVE COURSE LINE WITHOUT					
Figure	14				
	Step 25				

#### PART 4: Manually Configure the Multi AV System (if needed)

**NOTE:** If the screen in Figure 15 is not displayed, click on the **Home** icon.

26. Select Re/programming Configuration.



Figure 15

27. Read the Precautions.

When finished, touch the "Confirmed instructions" box to insert a check mark, then select **Next**.

13.4V VI Home Screen () Help **e** Back ent Scree X Re/programming, Configuration Precaution Vehicle Selection Operating suggestions for reprogramming, progra Please review the all of precautions, and click the " touch "Next". amming and C/U configration: 'Confirm'' check box after confirming the its points. And **Precautions** "Back" and "Home" button may not be used on this flo For reprogramming and programming 1. Install the latest version of the CONSULT-III plus sortware, reprogramming/programming data to this CONSULT-III plus PC. 2. Preparation and read the service manual or reprogramming procedure sheet. For ECU Configuration guration data to new ECU, after replace it. hfiguration data, ECU can not work. Please rite the right data riting the wro ion using manual mode le's spec and its configuration spec, following the ECU can not work. Please write the right data. g completely. Do not abort without saving data. For ECU Co Step Next 27 V **Confirmed instructions** 

Figure 16

28. Select the Manual Selection (Vehicle Name) tab, then select the applicable Model and Year.

**NOTE:** If the screen shown in Figure 17 does not display, proceed to step 30.

29. Select Select.

30. Confirm the correct **Model Name** and **Model Year** are displayed.

When finished, select Confirm.



Figure 17

CONSULT-III plus Ver.CSP19.10 VIN:	- Vehicle : -	States
Back Reme Print Screen Capture	Messarement Mode Recorded Data Recip	VI MI
Ke/programming, Configuration	le Selection	
Please confirm selected information and to touch "Change".	uch "Confirm". In case you want to select anothe	r vehicle,
VIN or Chassis #	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
Vehicle Name :	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
Model Year	XXXXXXXXXXX	
	1/1	
	L	
		Change
	Step	
	30	

Figure 18

### Step 31 below applies to 2017 QX30 vehicles ONLY. For all other vehicles, proceed to step 32.

31. Enter your NNAnet.com Username & Password, then select Submit.



Figure 19

32. Confirm the correct VIN is displayed.

When finished, select Confirm.

**NOTE:** If the VIN displayed is incorrect, input the correct VIN. When finished, select **Confirm**.



Figure 20

CONSULT-III plus Ver.31.21 Ver.CSP19.1	0VIN:	Vehicle : -	Country : United States
Back Home Print Screen	Screen Capture	orded Help 13.2V	🖬 🗙 🖿 🔜 🔀
Diagnosis (One System) Sy	stem Selection		
NISSAN/INFINITI	Rer	nault	X-Badge
Group	All system	ns 🔻	
ENGINE	TRANSMISSION	Step	טוס
ABS		33	AUTO SLIDE DOOR
METER/M&A	EHS/PKB	CONVERTIBLE ROOF	PRECRASH SEATBELT
ВСМ	MOTOR CONTROL	HEAD LAMP LEVELIZER	AUTO DRIVE POS.
AIR BAG	EPS/DAST 3	e-4WD	ALL MODE AWD/4WD
ICC/ADAS	IPDM E/R	LASER/RADAR	DIFF LOCK
HVAC	AIR PRESSURE MONITOR	INTELLIGENT KEY	4WAS(MAIN)/RAS/HICAS
		· · · · · · · · · · · · · · · · · · ·	1/3

Figure 21

#### 33. Select MULTI AV.

• Use the scroll arrow if needed.

34. Select After ECU Replacement.



Figure 22

35. Select Manual selection.



Figure 23

- 13.2V -() Help × Back ...... Re/programming, Configuration ◀ Manual Configuration Operation Selection Write C 7/9 Manual Configuration Step Identify the correct model and configuration mode with Configuration list described on Serv Confirm and/or change setting value for each item, touch "Next". Make sure to touch "Next" even if the indicated configuration of brand new BCM is same as th configuration. If not, configuration which is set automatically by selecting vehicle model can n memorized. 36 0 7 0 1 Items Setting Valu DESTINATION United States T Step • NAVIGATION WITH 37 v LDP (LANE DEPARTURE PREVENTION) On HYBRID FR TYPE 4WD V V CAMERA SYSTEM NONE/AVM ph3 PREDICTIVE COURSE LINE WITHOUT ▼ Next 1/2 Figure 24
- 36. Use the drop down menus to select the **Configuration** options that were printed or written down in step 18.
  - Use the scroll arrow if more than one page of information is available.

**NOTE:** Configurable options will differ between models. Your screen may look different from Figures 24 and 25.

37. Select Next.

38. Confirm the configuration displayed is correct, then select **OK**.

CONSULT-III plus Ver.31.21 Ver.CSP19.10	VIN:JN1BV7AP6EM670024	Vehicle : INFI	ITI Q50 V37 2014	Country : United States			
Back Rome Print Screen	Screen Capture	d Pelp	12.3V VI	× • • • •			
Re/programming, Configuration	Confirmation of Replace ECU	ite Configuration	Print Result / Operation Comp	lete 6/7			
Write Configuration							
Following setting value for each it Confirm setting value for each item	Following setting value for each item are saved to vehicle ECU. Confirm setting value for each items, if OK, touch "OK" to save them to vehicle ECU.						
Items		Set	ting Value				
DESTINATION		Unit	ed States				
NAVIGATION		,	WITH				
LDP (LANE DEPARTURE PREVEN	ΓΙΟΝ)		On				
HYBRID			Off				
CAMERA SYSTEM		NON	EIAVM ph3	Cancel			
PREDICTIVE COURSE LINE		W	тноит				
			1/2				
	Figure 25	)					
				Step 38			

- 39. Turn the ignition OFF, then start the engine or Ready, and wait for about 30 seconds.
- 40. Use C-III plus to clear any codes from the Multi AV system.
  - a. Select Home on the C-III plus screen.
  - b. Select Diagnosis (One System) > Multi AV > Self Diagnosis Results.
  - c. Clear any codes that may be present.

Step 41 below applies to 2014-2016 Q50 and 2017 QX30 vehicles ONLY. For all other vehicles, proceed to step 42.

41. Write down the Unit ID number (see Figure 26) as follows:

**NOTE**: The unit ID number will be used in Part 5 of the procedure.

- a. Select ECU Identification on the C-III plus screen.
- b. Write down the UNIT ID number.

CONSULT-III plus Ver.42.20 VIN:-	Vehicle : -	Country : United States
Back Print Screen Capture Measure	Recorded Data	
Diagnosis (One System) System Selection	MULTI AV	Step
Self Diagnostic Data Monitor	ork support	41a
ECU PART NUMBER	■28887-#HB0	<b>F.</b> I
UNIT ID	18,09900909284	
		Step 41b
		1/1
	Figure 26	

- 42. Close C-III plus and disconnect the plus VI from the vehicle.
- 43. Check that the operation of the DCU and, if equipped, RearView Monitor camera images (fixed guide lines and predictive course lines) are normal.

- 44. Register the replacement DCU by calling Infiniti Owner Services at **1-855-444-7244**. Listen to the prompts and select the option for the "Infiniti Connection Specialist."
  - During this call you will be asked for the Unit ID number (see step 38) and the VIN.
  - Infiniti Owner Services hours of operation are:

Monday – Saturday: 8:00am to Midnight EST Closed Thanksgiving, Christmas, and New Years Day

**IMPORTANT:** <u>Step 44</u> MUST be performed to register the replacement DCU. If this step is not performed, the Infiniti InTouch Apps feature – if the vehicle has an active subscription – will not function. Perform this step even if the vehicle does not have an active Infiniti InTouch Apps subscription, as future enrollment will also be affected.

45. Disconnect the GR8 from the 12V battery.

PART 6: 2014 Q50 Vehicles <u>ONLY</u> Check the Software Version, Confirm it is the Newest Version, Update if Needed.

NOTE: PART 6 does NOT apply to 2015-2017 model year vehicles.

Click  $\rightarrow$  <u>HERE</u>  $\leftarrow$  This will link you to the General Procedure for Infiniti InTouch Software Update.