Nissan March K13 Htr12de Factory Service Manual Full download: http://manualplace.com/download/nissan-march-k13-htr12de-factory-service-manual/ ENGINE

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< PRECAUTION >

PRECAUTION PRECAUTIONS

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the "SRS AIR BAG".
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

WARNING:

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

< REMOVAL AND INSTALLATION > **REMOVAL AND INSTALLATION** ACCELERATOR CONTROL SYSTEM

Exploded View



- For the electrical inspection of accelerator pedal position sensor. Refer to following;
- HR12DE (TYPE 1): EC-269, "Component Inspection"
- HR12DE (TYPE 2): EC-464, "Component Inspection"

CAUTION:

When harness connector of accelerator pedal position sensor is disconnected, perform "ACCELERA-TOR PEDAL RELEASED POSITION LEARNING". Refer to following;

HR12DE (TYPE 1): <u>EC-104</u>, "Work Procedure"

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ACCELERATOR CONTROL SYSTEM

< REMOVAL AND INSTALLATION > • HR12DE (TYPE 2): <u>EC-377, "Work Procedure"</u>

SECTION AVIGATION SYSTEM

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AUDIO SYSTEM

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< PRECAUTION > PRECAUTION PRECAUTIONS

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COMPONENT PARTS

< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION COMPONENT PARTS

Component Parts Location

AUDIO LESS



1. Rod antenna

AUDIO



- 1. Rod antenna
- 4. Front door speaker LH
- 2. Rear door speaker RH
- 5. Rear door speaker LH

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- 3. Front door speaker RH
- 6. Audio unit

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COMPONENT PARTS

< SYSTEM DESCRIPTION >

Component Description

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Part name	Description
Audio unit	 AM/FM radio, replaying function of CD, auxiliary Input functions are integrated. Sound signals are output to each speaker.
Front door speaker	Outputs sound signal from audio unit.Outputs high, mid and low range sounds.
Rear door speaker	Outputs sound signal from audio unit.Outputs high, mid and low range sounds.
Rod antenna	Radio signal received by antenna is sent to audio unit.

[AUDIO SYSTEM]

< SYSTEM DESCRIPTION > SYSTEM

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System Description	Λ
AUDIO SYSTEM When the audio system is on, radio signals are received by the radio antenna. The audio unit then sends audio signals to the each speaker. FUNCTION DESCRIPTION	B C
 AM/FM Radio Mode AM/FM radio tuner is built into audio unit. Radio signals are received by radio antenna, next they are input to audio unit. Audio unit outputs the sound signal to each speaker. 	D
CD Mode • CD function is built into audio unit. • Audio unit outputs sound signal to each speaker when CD is inserted to audio unit.	E
AUX ConnectionWhen the external device is connected to the AUX (auxiliary) input jack of the audio unit, the external device inputs a sound signal to the audio unit.	F
 When AUX mode is selected, audio unit outputs sound signal to each speaker. 	G

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< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (AUDIO UNIT)

Diagnosis Description

Self-diagnosis mode can check the following items.

- Display all icons and segments
- Display LCD

Version Check

1.

Audio unit hardware/software/EEP versions

OPERATION PROCEDURE

- Turn ignition switch to the ON position. 1.
- 2. Turn the audio unit OFF.
- 3. While pressing the "1" button, turn the volume control dial clockwise or counterclockwise for 30 clicks or more. (When the selfdiagnosis mode is started, a short beep will be heard.)

Icons, Segments and LCD Check

- All display icons and segments will be illuminated for 2 seconds. 1.
- 2. Press the "DISP" switch to display LCD check segments pattern.

IOIT CHECK	
Press the "DISP" switch to enter version diagnostics. "Soft" (audio software version) is displayed.	
	JSNIA2094ZZ





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DIAGNOSIS SYSTEM (AUDIO UNIT)

< SYSTEM DESCRIPTION >

[AUDIO SYSTEM]

- Press the "DISP" switch again to display the "Hard" (audio hardware version).
 - A JTO P NEWS REG AF TA MIX RDM RPTALLIDISCFOLDERTRACK @ 0@@@@@ AMAW H @ T 0 V 0 0 0 0 @ % Till C JSNIA2095ZZ D AUTO.P NEWS REG AF TA MIX RDM RPTALLIDISCFOLDERTRACK @ 0@@@@@ FMS.W C D M e c h V # # # @ Till JSNIA3070ZZ Unit H
- Press the "DISP" switch again to display the "CD Mech" (CD mechanism version).

4. Press the "DISP" switch again to display the "EEP" (audio unit EEPROM version).

AUTO,P NEWS REG AF TA MIX RDM RPTALLIDISCFOLDERTRACK @ 0@@@@ FMI2 T LMM EEP . VOOOOO & YIII	H
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Finishing Self-diagnosis Mode

1. self-diagnosis mode is canceled when turning the ignition switch OFF.

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ECU DIAGNOSIS INFORMATION AUDIO UNIT

Reference Value

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TERMINAL LAYOUT



PHYSICAL VALUES

Terminal (Wire color)		Description			Condition	Reference value	
+	_	Signal name	Input/ Output		Condition	(Approx.)	
2 (GR)	3 (P)	Sound signal front door speaker LH	Output	Ignition switch ON	Sound signal output	(V) 1 0 -1 + 2ms SKIB3609E	
4 (W)	5 (R)	Sound signal rear door speaker LH	Output	Ignition switch ON	Sound signal output	(V) 1 0 -1 -1 SKIB3609E	
7 (L)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage	
0				Ignition	Lighting switch is OFF.	0 V	
(Y)	Ground	Illumination signal	Input	switch ON	Lighting switch is 1st or 2nd.	12.0 V	
11 (BG)	12 (V)	Sound signal front door speaker RH	Output	Ignition switch ON	Sound signal output	(V) 1 0 -1 -1 SKIB3609E	

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AUDIO UNIT

< ECU DIAGNOSIS INFORMATION >

Terr (Wire)	minal color)	Description			Condition Reference value		А
+	_	Signal name	Input/ Output	Condition		(Approx.)	
						(V)	В
13 (L)	14 (Y)	Sound signal rear door speaker RH	Output	Ignition switch ON	Sound signal output	1 0 -1 →→ 2ms	С
						SKIB3609E	D
19 (LG)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage	E
42	—	Antenna signal	Input	—	_	_	

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[AUDIO SYSTEM]

[AUDIO SYSTEM]

WIRING DIAGRAM AUDIO SYSTEM

Wiring Diagram

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For connector terminal arrangements, harness layouts, and alphabets in a \bigcirc (option abbreviation; if not described in wiring diagram), refer to <u>GI-12. "Connector Information"</u>.

BASIC INSPECTION DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

OVERALL SEQUENCE



• Check the symptom.

>> GO TO 2.

2. PERFORM DIAGNOSIS BY SYMPTOM

Perform the relevant diagnosis referring to the diagnosis chart by symptom. Refer to AV-14, "Symptom Table"

>> GO TO 3.

3.REPAIR OR REPLACE MALFUNCTIONING PARTS

Repair or replace the malfunctioning parts.

>> GO TO 4.

4.FINAL CHECK

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< BASIC INSPECTION >

Perform the operation to check that the malfunction symptom is solved or any other symptoms are present. Is there any symptom?

YES >> GO TO 2. NO >> INSPECTION END

	POW	ER SUP	PLY AND	GRO	UND CIRCUIT	
< DTC/CIRCUIT DIA	GNOSIS >					[AUDIO SYSTEM]
DTC/CIRCL	IIT DIA	AGNO	SIS			
POWER SUPP	LY AND	GROU	ND CIRC	CUIT		
AUDIO UNIT						
AUDIO UNIT : Di	agnosis I	Procedu	re			INFOID:000000005921602
1.CHECK FUSE						
Check for blown fuses	6.					
	Power source	9			Fuse No.	
	Battery				37	
Ignitio	on switch ACC	or ON			19	
NO >> Be sure to 2.CHECK POWER S	o eliminate SUPPLY CIP	cause of m RCUIT	alfunction be	efore inst	alling new fuse.	
Check voltage betwee	en audio uni	it harness o	connectors a	nd grour	nd.	
	(-	+)				Voltage
Signal name	Audi	o unit	(-)		Ignition switch position	(Approx.)
Battery power supply	Connector	19			OFF	
ACC power supply	M46	7	Grou	nd	ACC	Battery voltage
YES >> INSPECT NO >> Check ha	rmar? ION END rness betw	een audio (unit and fuse			

SYMPTOM DIAGNOSIS AUDIO SYSTEM SYMPTOMS

Symptom Table

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AUDIO SYSTEM

Symptoms	Check items	Possible malfunction location / Action to take		
Audio sound is not beard	No sound from all speakers.	Audio unit power supply and ground circuit. Refer to <u>AV-13</u> , "AUDIO UNIT : Diagnosis Procedure".		
	Sound is not heard only from the specific places.	Sound signal circuit of malfunctioning system.		
AM/FM radio is not received.	Other audio sounds are normal.	Antenna feeder		

NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

NORMAL OPERATING CONDITION

Description

RELATED TO AUDIO

- The majority of the audio malfunctions are the result of outside causes (bad CD, electromagnetic interference, etc.). Check the symptoms below to diagnose the malfunction.
- The vehicle itself can be a source of noise if noise prevention parts or electrical equipment is malfunctioning. Check that noise is caused and/or changed by engine speed, ignition switch turned to each position, and operation of each piece of electrical equipment. Then determine the cause.
- NOTE:
- CD-R is not guaranteed to play because they can contain compressed audio (MP3, WMA) or could be incorrectly mastered by the customer on a computer.
- Check that the CDs carry the Compact Disc Logo. If not, the disc is not mastered to the red book Compact Disc Standard and may not play.

Symptoms	Cause and Counter measure				
	Check that the disc was inserted correctly.				
	Check that the disc is scratched or dirty.				
	Check if there is condensation inside the player. If there is, wait until the condensation is gone (about 1 hour) before using the player.				
	If there is a temperature increase error, the CD player will play correctly after it returns to the nor- mal temperature.				
Cannot play	Files with extensions other than ".MP3", ".WMA", ".M4A", ".mp3", ".wma", ".m4a"cannot be played. In addition, the character codes and number of characters for folder names and file names should be in compliance with the specifications.				
	If there is mixture of music CD files (CD-DA data) and MP3/WMA/AAC files on a CD, only the music CD files (CD-DA) will be played.				
	Check if the disc or the file is generated in an irregular format. This may occur depending on the variation or the setting of MP3/WMA writing applications or other text editing applications.				
	Check if the finalization process, such as session close and disc close, is done for the disc.				
	Check if the disc is protected by copyright.				
Deer equal quality	Check if the disc is scratched or dirty.				
	Bit rate may be too low.				
It takes a relatively long time before the music starts playing.	If there are many folder or file levels on the MP3/WMA CD, or if it is a multisession disc, some time may be required before the music starts playing.				
Music cuts off or skips	The writing software and hardware combination might not match, or the writing speed, writing depth, writing width, etc., might not match the specifications. Try using the slowest writing speed.				
Skipping with high bit rate files	Skipping may occur with large quantities of data, such as for high bit rate data.				
Move immediately to the next song when playing.	When a non-MP3/WMA file has been given an extension of ".MP3", ".WMA", ".mp3" or ".wma", or when play is prohibited by copyright protection, there will be approximately 5 seconds of no sound and then the player will skip to the next song.				
The songs do not play back in the desired order.	The playback order is the order in which the files were written by the writing software. Therefore, the files might not play in the desired order.				

Noise resulting from variations in field strength, such as fading noise and multi-path noise, or external noise from trains and other sources, is not a malfunction.

NOTE:

- Fading noise: This noise occurs because of variations in the field strength in a narrow range due to mountains or buildings blocking P the signal.
- Multi-path noise: This noise results from a time difference between the broadcast waves directly from the station arriving at the antenna and the waves reflected by mountains or buildings.

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< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION AUDIO UNIT

Removal and Installation

REMOVAL

- 1. Remove the cluster lid C. Refer to IP-13, "Removal and Installation".
- 2. Remove the screws and disconnect the connector to remove the audio unit.
- 3. Remove the bracket screws to remove the audio unit.

INSTALLATION

Install in the reverse order of removal.

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[AUDIO SYSTEM]