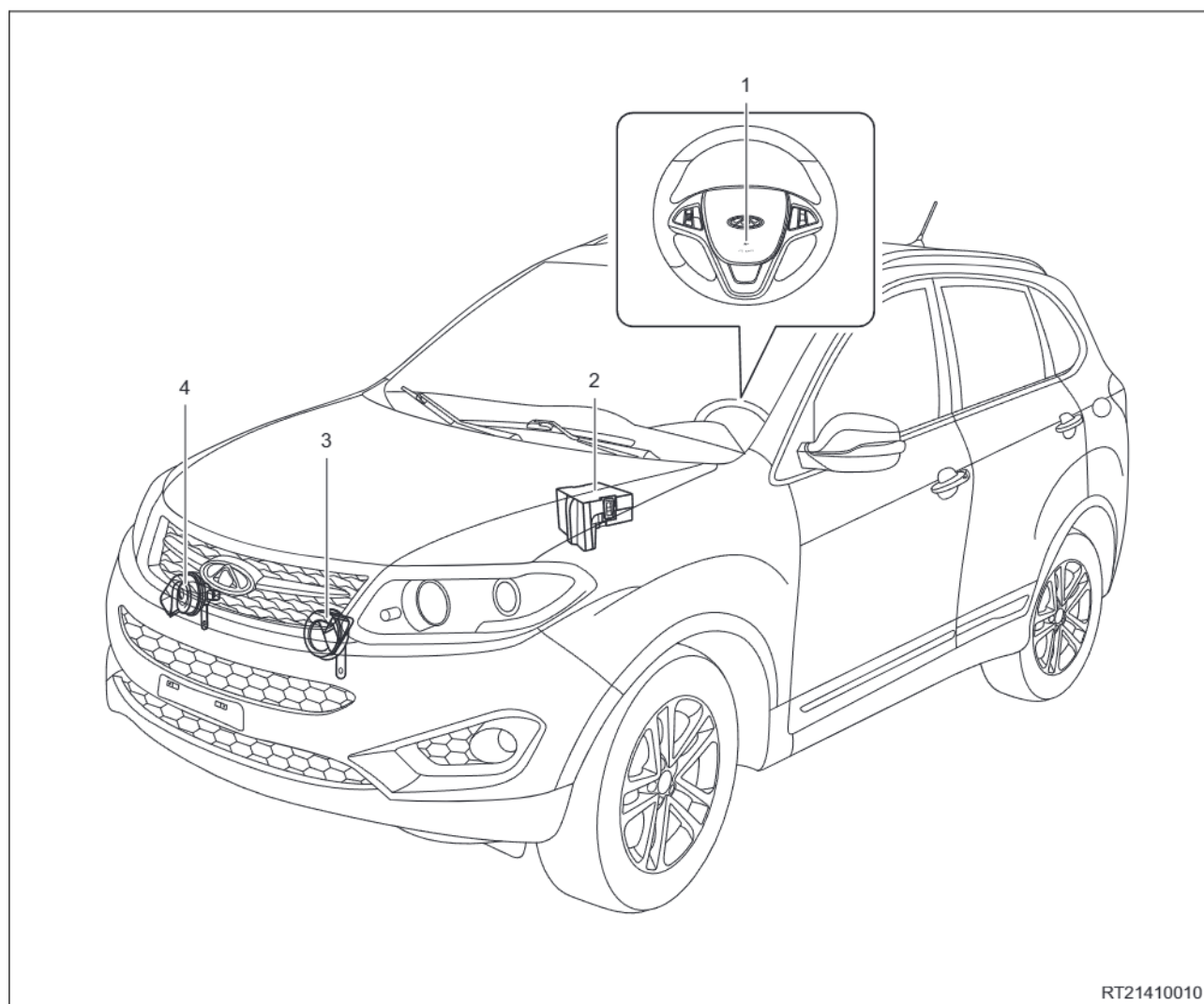

HORN

GENERAL INFORMATION	41-3	Horn Fuse Inspection	41-6
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GENERAL INFORMATION

Description



RT21410010

41

1 - Horn Switch	2 - Engine Compartment Fuse and Relay Box
3 - Low Pitched Horn	4 - High Pitched Horn

This vehicle is equipped with high pitched and low pitched electronic horn system.

Horn system consists of the following components:

- Horn: high pitched horn and low pitched horn are installed on front pump crossmember.
- Horn switch: horn switch is installed on steering wheel.
- Horn fuse: horn fuse is located in engine compartment fuse and relay box.
- Horn relay: horn relay is located in engine compartment fuse and relay box.

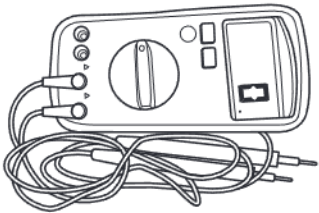
Specification

Torque Specification

Description	Torque (N·m)
Horn Fixing Bolt	16 ± 2

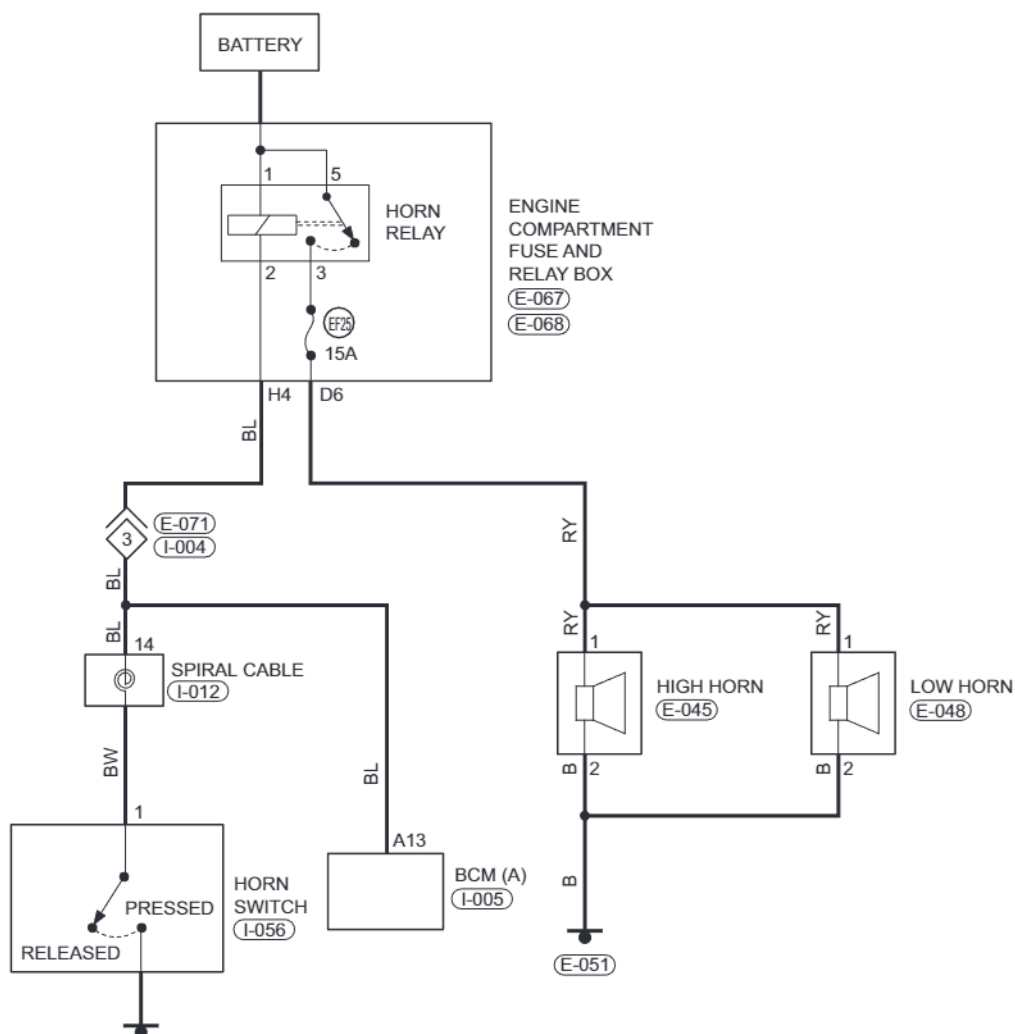
Tool

General Tool

Digital Multimeter	 RCH0000002
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Circuit Diagram

Horn System



H8	H7	H6	H5	H4	H3	H2	H1
H16	H15	H14	H13	H12	H11	H10	H9

(E-067)
W

1	2	3	4	5	6
7	8	9	10	11	12
13	14				

(E-071)
B

A17	A18	A19	A20	A21	A22	A23	A24	A25	A26	A27	A28	A29	A30	A31	A32
A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16

(I-005)
L

D1	D2	D3	D4	D5
D6	D7	D8	D9	D10

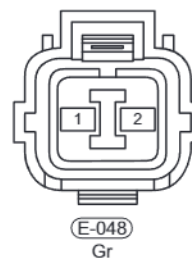
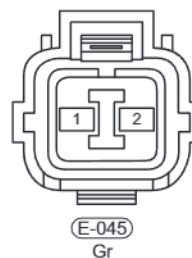
(E-068)
W

9	10	11	12	13	14	15	16
1	2	3	4	5	6	7	8

(I-012)
W

1

(I-056)
W



ET21410010

DIAGNOSIS & TESTING

Problem Symptoms Table

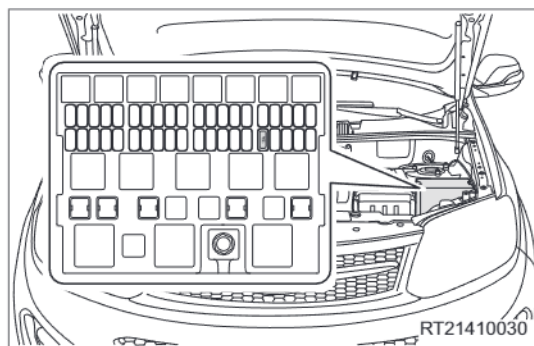
HINT:

Use the table below to help determine the cause of the problem symptoms. Check each suspected area in sequence. Repair or replace the faulty components, or adjust as necessary.

Symptom	Suspected Area	See page
Horn does not sound	Horn fuse (blown)	51-34
	Low pitched horn (damaged)	41-8
	High pitched horn (damaged)	41-8
	Horn switch (damaged)	32-65
	Spiral cable (damaged)	32-67
	Wire harness (short or open)	-

Horn Fuse Inspection

- Identify the horn fuse on the engine compartment fuse and relay box.



- Check horn fuse.
 - Using a fuse puller, remove the horn fuse (15 A).
 - Check if the fuse is blown. Replace the fuse if it is blown.

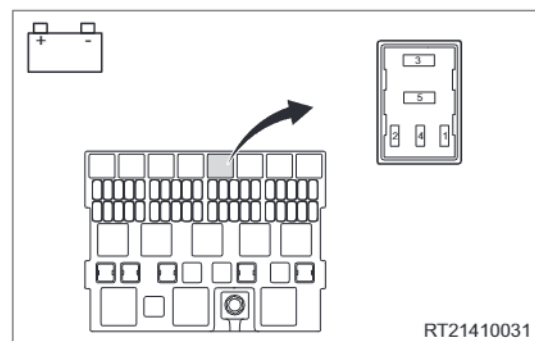
CAUTION

- Use a fuse with the same specification as the original fuse to avoid affecting normal usage of electrical equipment.

Horn Relay Inspection

1. Check horn relay.
 - a. Remove the relay from engine compartment fuse and relay box.
 - b. Measure resistance according to the table below.

Multimeter Connection	Condition	Specified Condition
Terminal 3 - Terminal 5	When battery voltage is not applied between terminal 2 and terminal 1	No continuity
Terminal 3 - Terminal 5	When battery voltage is applied between terminal 2 and terminal 1	Continuity



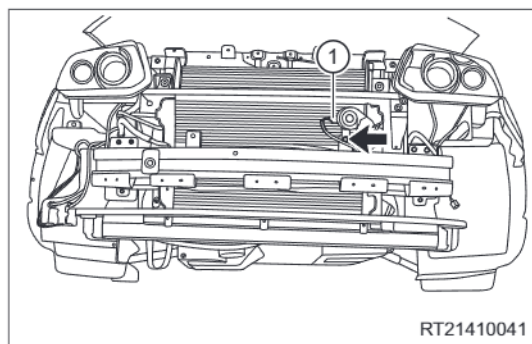
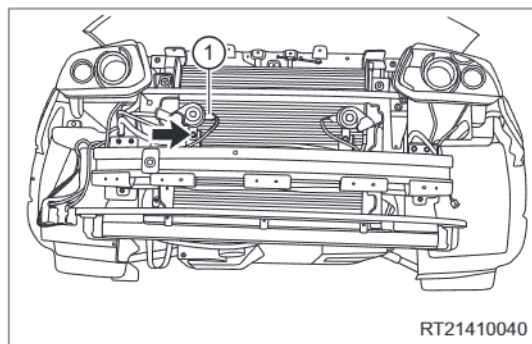
If result is not as specified, replace the relay.

ON-VEHICLE SERVICE

Horn

Removal

1. Turn off all the electrical equipment and ignition switch.
2. Disconnect the negative battery cable.
3. Remove the radiator grille assembly (See page 41-8).
4. Remove the high pitched horn.
 - a. Disconnect the high pitched horn wire harness connector (1).
 - b. Remove the fixing bolt (arrow) from high pitched horn bracket, and remove the high pitched horn.
(Tightening torque: 16 ± 2 N·m)
5. Remove the low pitched horn.
 - a. Disconnect the low pitched horn wire harness connector (1).
 - b. Remove the fixing bolt (arrow) from the low pitched horn bracket, and remove the low pitched horn.
(Tightening torque: 16 ± 2 N·m)



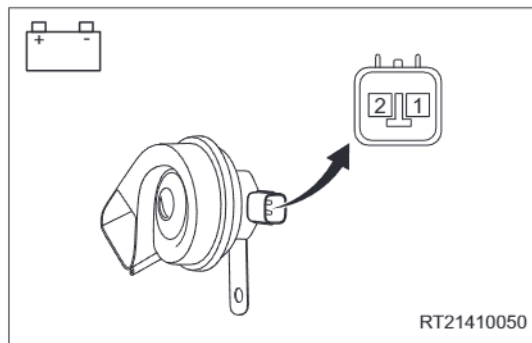
41

Inspection

1. Check high pitched horn.
Apply battery voltage to the high pitched horn and check the operation of high pitched horn.

Measurement Condition	Condition	Specified Condition
Battery positive (+) - Terminal 1 Battery negative (-) - Terminal 2	Always	Sounds

If result is not as specified, replace the high pitched horn.



2. Check low pitched horn.

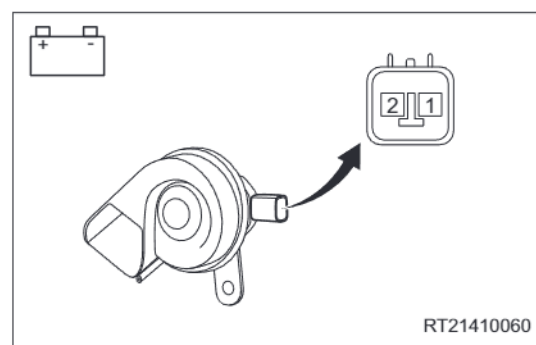
Apply battery voltage to the low pitched horn and check the operation of low pitched horn.

Measurement Condition	Condition	Specified Condition
Battery positive (+) - Terminal 1 Battery negative (-) - Terminal 2	Always	Sounds

If the result is not as specified, replace the high pitched horn.

3. Check wire harness.

Using a digital multimeter, check for an open, short or ground failure in the horn system wire harness. Replace if necessary.



Installation

Installation is in the reverse order of removal.

CAUTION

- Tighten fixing bolts to the specified torque.
- Install each connector in place.

