

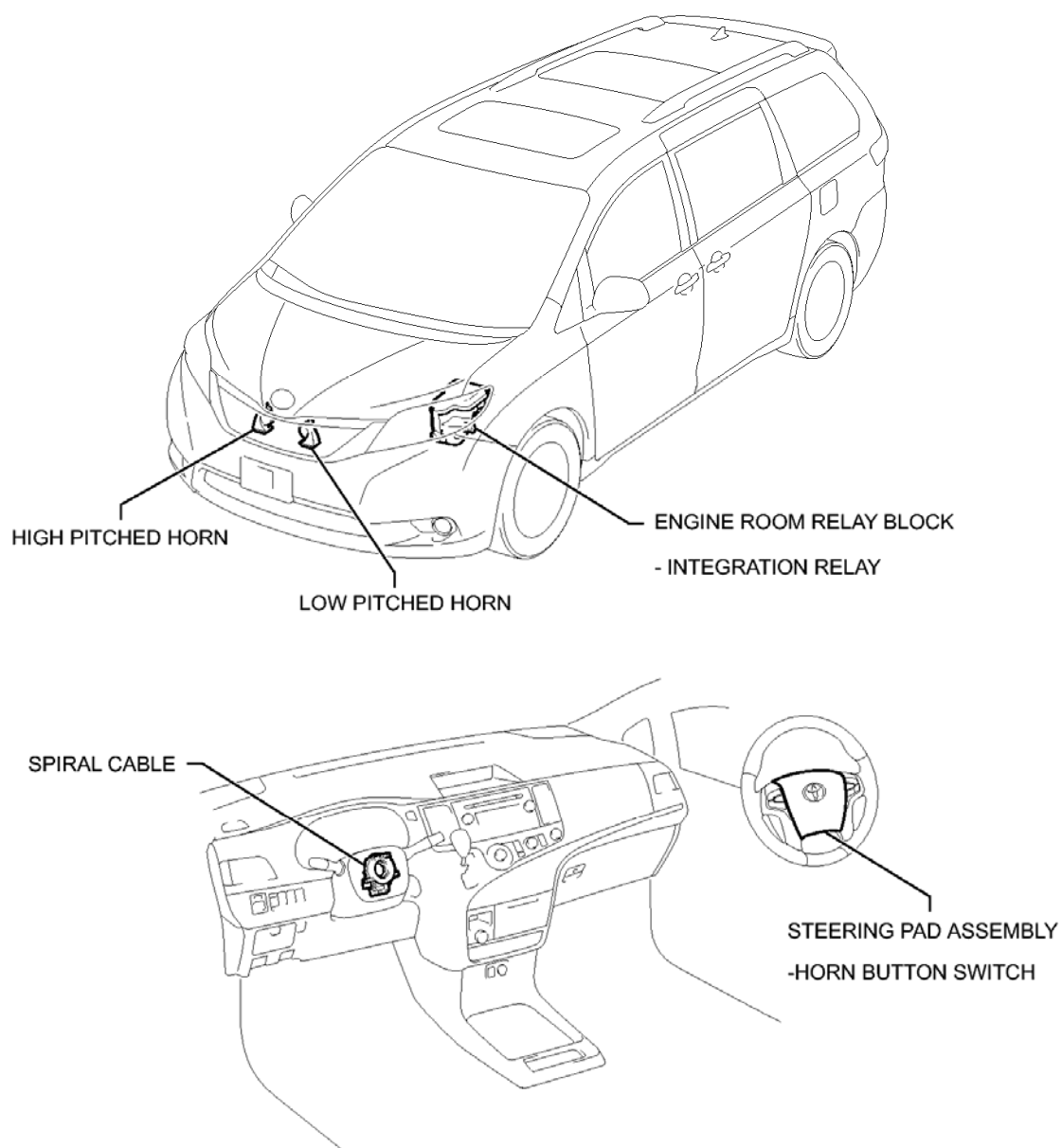
ACCESSORIES & EQUIPMENT

Horn (Inspection) - Sienna

HORN SYSTEM

PARTS LOCATION

ILLUSTRATION



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Fig. 1: Horn System Components Location
 Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

SYSTEM DIAGRAM

SYSTEM DIAGRAM

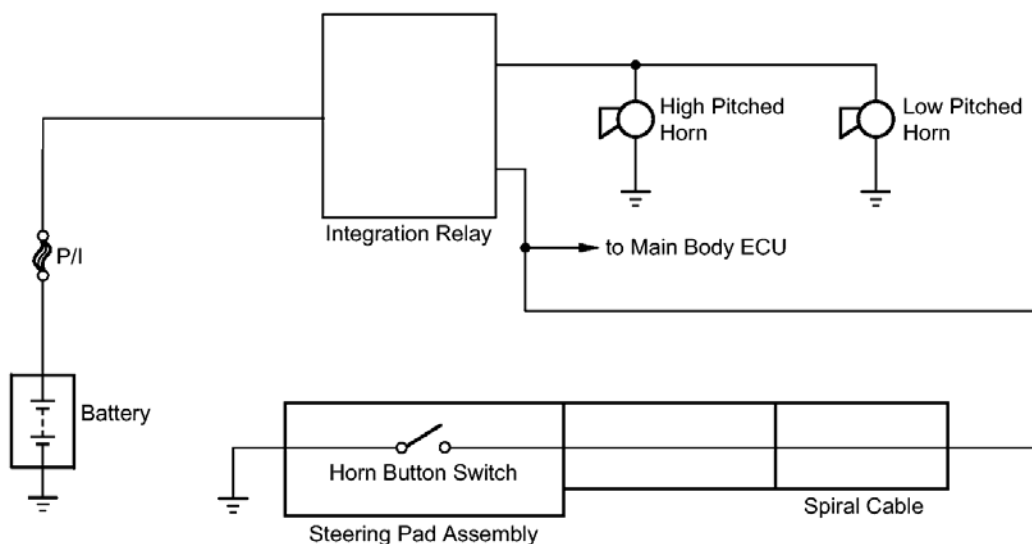


Fig. 2: Horn System Diagram

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

PROBLEM SYMPTOMS TABLE

PROBLEM SYMPTOMS TABLE

HINT:

Use the table below to help determine the cause of the problem symptom. The potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

HORN SYSTEM

Symptom	Suspected Area	See
Horn does not sound.	Integration relay	-
	High pitched horn assembly	Refer to <u>INSPECTION</u>
	Low pitched horn assembly	Refer to <u>INSPECTION</u>
	Steering pad assembly (horn button switch)	Refer to <u>ON-VEHICLE INSPECTION</u>
	Steering pad switch	Refer to <u>INSPECTION</u>
	Spiral cable	Refer to <u>INSPECTION</u>
	Wire harness	-

ACCESSORIES & EQUIPMENT

Horn (Preparation) - Sienna

HORN

RECOMMENDED TOOLS

RECOMMENDED TOOLS

	09080-1C110	Toyota Electrical Tester Set	
	09080-2C100	Test Lead Set	

EQUIPMENT

EQUIPMENT

Battery	
Torque wrench	

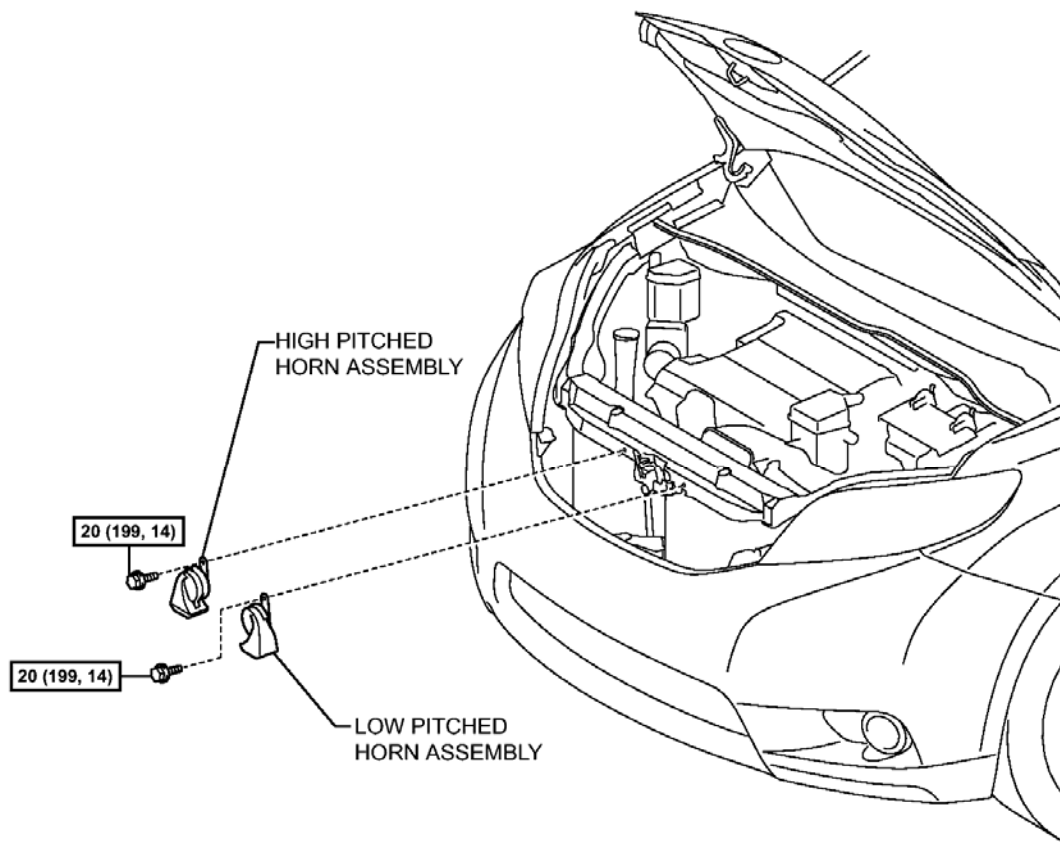
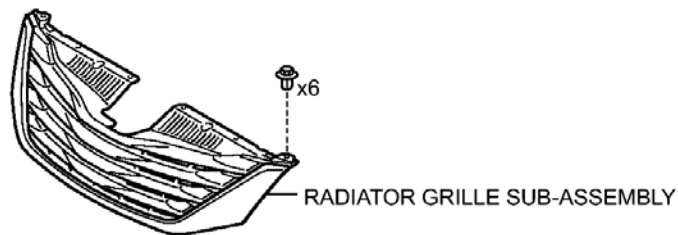
ACCESSORIES & EQUIPMENT

Horn (Inspection) - Sienna

HORN

COMPONENTS

ILLUSTRATION



$\boxed{\text{N}^*\text{m (kgf}^*\text{cm, ft.}^*\text{lbf)}}$: Specified torque

0

Fig. 1: Horn Replacement Components

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

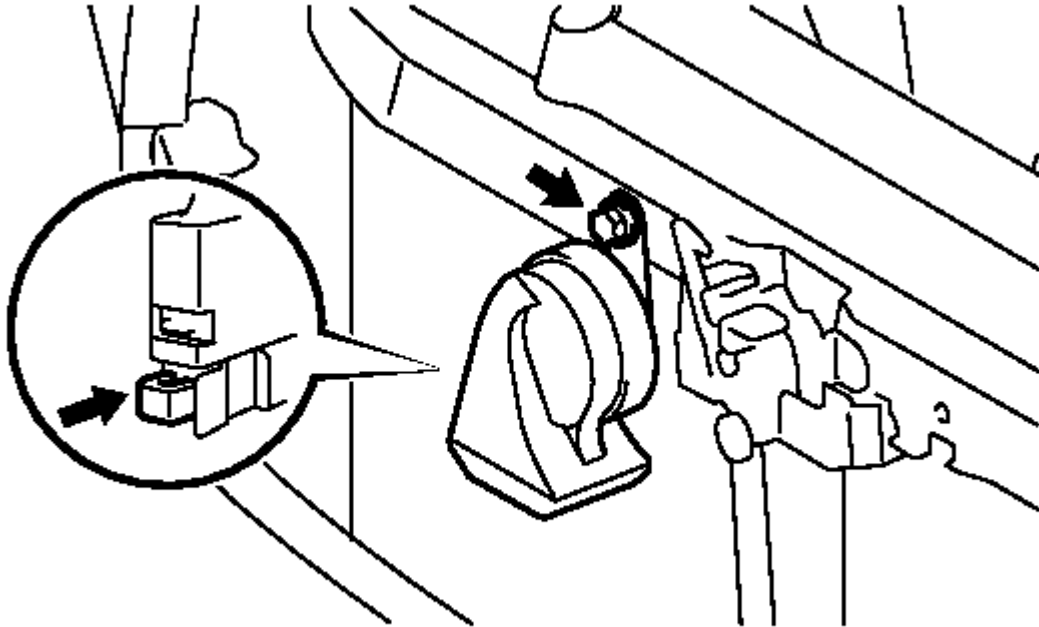
REMOVAL

REMOVAL

1. REMOVE RADIATOR GRILLE SUB-ASSEMBLY . Refer to **REMOVAL - Step 3**

2. REMOVE HIGH PITCHED HORN ASSEMBLY

- a. Disconnect the connector.



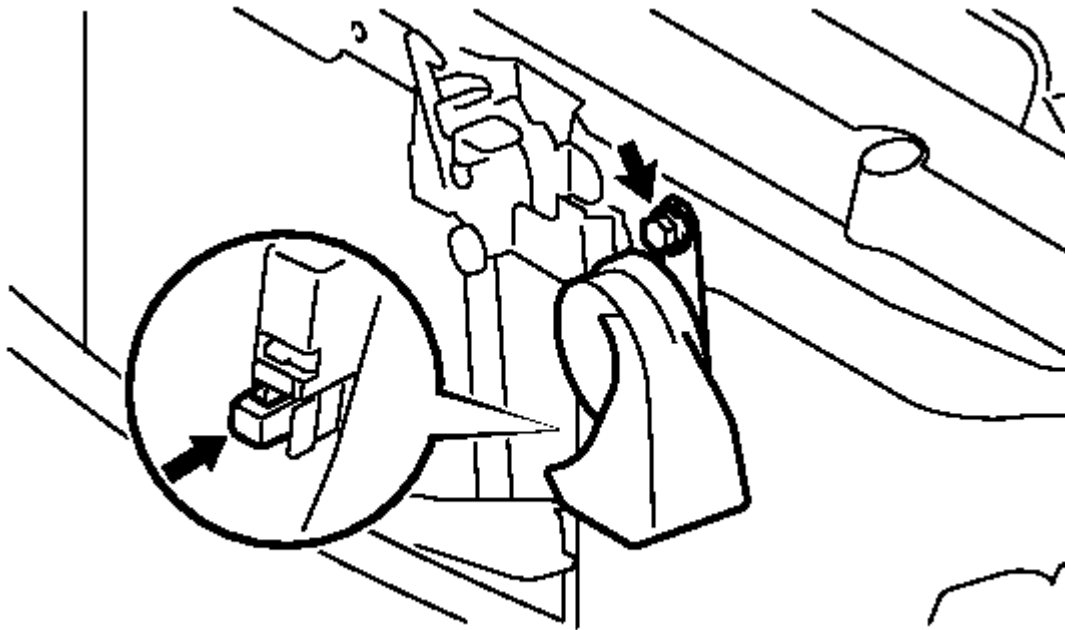
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Fig. 2: Removing Bolt & High Pitched Horn Assembly
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

- b. Remove the bolt and the high pitched horn assembly.

3. REMOVE LOW PITCHED HORN ASSEMBLY

- a. Disconnect the connector.



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Fig. 3: Removing Bolt & Low Pitched Horn Assembly
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

- b. Remove the bolt and the low pitched horn assembly.

INSPECTION

INSPECTION

1. INSPECT HIGH PITCHED HORN ASSEMBLY

- a. Apply battery voltage and check the operation of the horn according to the table below.

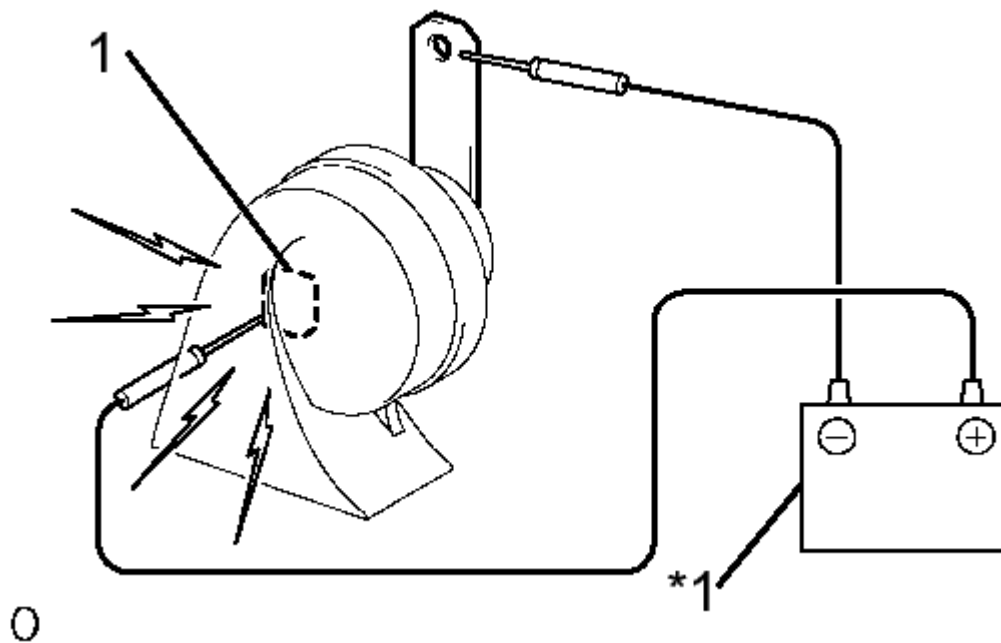


Fig. 4: Inspecting High Pitched Horn Operation With Battery Voltage Applied
 Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

TEXT IN ILLUSTRATION

*1 Battery

OK

Measurement Condition	Specified Condition
Battery positive (+) --> Terminal 1	Horn sounds
Battery negative (-) --> Body ground	

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

2. INSPECT LOW PITCHED HORN ASSEMBLY

- a. Apply battery voltage and check the operation of the horn according to the table below.

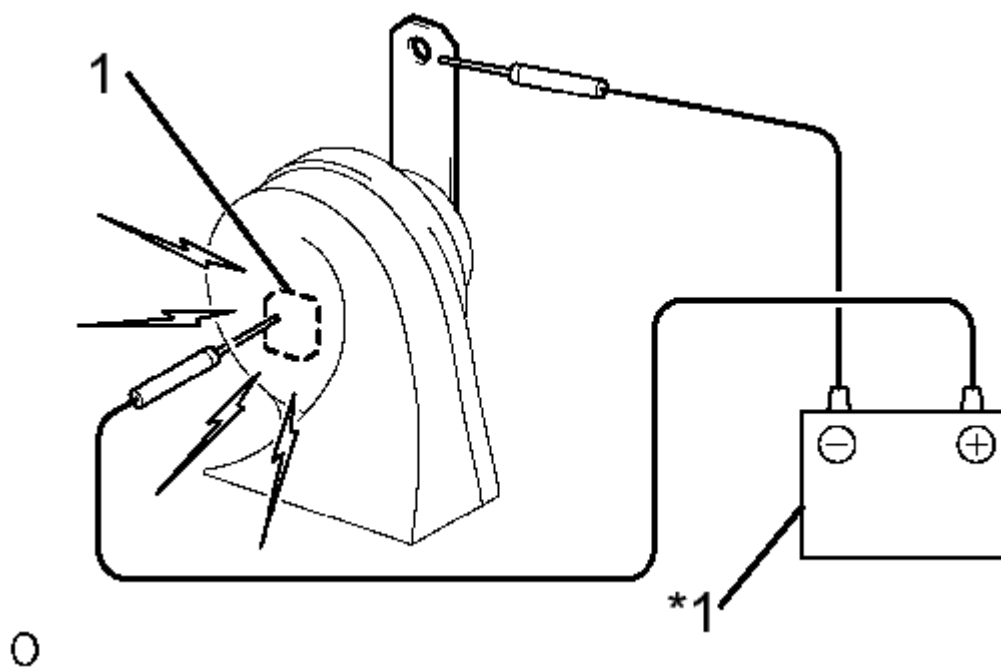


Fig. 5: Inspecting Low Pitched Horn Operation With Battery Voltage Applied
 Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

TEXT IN ILLUSTRATION

*1 Battery

OK

Measurement Condition	Specified Condition
Battery positive (+) -- > Terminal 1 Battery negative (-) -- > Body ground	Horn sounds

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

INSTALLATION

INSTALLATION

1. INSTALL HIGH PITCHED HORN ASSEMBLY

- Install the high pitched horn assembly with the bolt.

Torque: 20 N*m (199 kgf*cm, 14 ft.*lbf)

- b. Connect the connector.

2. INSTALL LOW PITCHED HORN ASSEMBLY

- a. Install the low pitched horn assembly with the bolt.

Torque: 20 N*m (199 kgf*cm, 14 ft.*lbf)

- b. Connect the connector.

3. INSTALL RADIATOR GRILLE SUB-ASSEMBLY . Refer to INSTALLATION - Step 2

ACCESSORIES & EQUIPMENT

Horns (Service Specifications) - Sienna

HORN

TORQUE SPECIFICATIONS

TORQUE SPECIFICATIONS

Part Tightened	N*m	kgf*cm	ft.*lbf
High pitched horn x Horn bracket	20	199	14
Horn bracket x Body	20	199	14