

Thank you for purchasing this product.

- Please read this instruction manual thoroughly before installing speakers, and install speakers correctly.

■ **Tools required for installation** Phillips screwdriver, Flat-head screwdriver, Clip driver, Pliers, Nippers, Wrench, Electric hand drill and bits, Cutting knife, Electrical tape, Scissors, Felt-tip pen

Safety caution

Be sure to observe the warning and caution provided below as they are critical for your safety. The meanings of the symbols are as follows.



These indicate what must not be done. (Inhibition marks)



This indicates what must be done. (Imperative mark)

Installation cautions

WARNING If the product is handled erroneously by ignoring the instruction of this mark, fatal hazard or serious injury on human body may result.			
<p>Work depending to instruction manual.</p> <p>When installing or wiring the product, be sure to follow strictly the instruction and installation manuals of the product. (If the instructions are not observed strictly, the product may be displaced and hit you during braking and there may also be a risk of electric shock or fire hazard.)</p>	<p>Remove battery connection before work.</p> <p>Before installing or wiring anything, be sure to remove the cable from the negative terminal of the battery. (Otherwise a shorting accident* may occur, which could result in fire accident.)</p>	<p>Use proper tools for the processing objects.</p> <p>When tightening a bolt or nut, always be sure to use the tool matching its size. If the securing torque of a part is specified, be sure to secure it with the specified force. (Otherwise the bolt or nut may be damaged or detached during use.)</p>	<p>Wrap cords with protective tape.</p> <p>The cords near metallic parts of the vehicle should be protected against sharp edge of the metallic parts by wrapping insulating tape around them. (If a cord is damaged, electric shock or short-circuiting* as well as fire hazard may result.)</p>
<p>Be careful not to damage the tank and electric wiring.</p> <p>In case the product is installed by making holes on the vehicle chassis, be careful never to damage the gasoline tank, piping, electric wiring or other parts of the vehicle. (Otherwise fire hazard may result.)</p>	<p>Do not cut insulation tube in the middle of a power cord.</p> <p>Do not use power cord for other products by cutting insulation tube in the middle of a power cord. (Otherwise a shorting accident* may occur, which could result in fire accident.)</p>	<p>Do not open the back and top covers of the product or modify it.</p> <p>(This may lead to fire hazard or other accident.)</p> <ul style="list-style-type: none"> • For inspection and servicing, consult your dealer or nearest KENWOOD service agent or distributor. • Servicing by the user may lead to fire hazard or other accidents. 	<p>Use a fuse with the specified rating.</p> <p>When the fuse is blown, first ensure that there is no short-circuiting* between the wired cords, then replace with a new fuse with the capacity (Ampere value) specified on the fuse box. (Using other fuse than specified may lead to fire hazard.)</p> <p>Please check the spec.</p> <p>For fuse replacement, refer to the owner's manual of your vehicle.</p>
<p>CAUTION</p> <p>If the product is handled erroneously by ignoring the instruction of this mark, injury on human body, or damage of product may result.</p>	<p>Use provided parts for installation.</p> <p>Be sure to install a product using provided parts. When parts other than the provided ones are used, a product may fall off and hit the passenger while driving, causing injury or product breakage.</p>	<p>Inspect the vehicle after installation.</p> <p>After installation of the product, be sure to check that the brake lamps, head lamps, direction indicators, windshield wipers, power window, etc. of the vehicle function normally. (If any of the vehicle functions are damaged due to incorrect wiring, etc., traffic accident may result.)</p>	

* **Short-circuiting and shorting accident**

Short-circuiting refers to the direct connection between the positive and negative poles of electricity. This may occur when a stripped cord (electric wiring) comes in contact with another cord or metallic part of vehicle. Short-circuiting may produce spark, which may be caught by surrounding objects and result in fire hazard.

Cautions on use

WARNING			
<p>Operate the car audio after stopping the vehicle.</p> <p>The car audio system should be operated after having stopped the vehicle in a safe place. (Operating it while driving a vehicle may lead to traffic accident.)</p>	<p>Do not use loud volume.</p> <p>During driving, do not turn the listening volume too high at which you cannot hear the sound outside the vehicle. (You may be unable to notice what is happening outside the vehicle, and a traffic accident may result.)</p>	<p>Do not continue sound output at an abnormal level.</p> <p>Do not use the speakers for a long period at a high volume level at which the sound is distorted. (The system may be overheated and fire hazard may result.)</p>	<p>Do not open the back and top covers of the product or modify it.</p> <p>(This may lead to fire hazard or other accident.)</p> <ul style="list-style-type: none"> • For the inspection and servicing, consult your dealer or nearest KENWOOD service agent or distributor. • Servicing by the user may lead to fire hazard and other accidents.
<p>Immediately stop operation in case of abnormality.</p> <p>Should any of the following abnormal phenomena is observed, immediately stop the use and operation of the product.</p> <ul style="list-style-type: none"> • No sound output. • Water is spilled on the product. • A foreign object such as metal or a piece of paper gets inside the product. 	<p>CAUTION</p> <p>Do not use the product for other purpose than car use.</p> <p>This product has been designed for installation and operation in a vehicle. Do not use it for other purpose. (Otherwise imperfect installation may cause the product to drop and cause injury.)</p>		

- Please install depending to this instruction manual. Please keep it carefully after finishing reading this. It is better to keep this manual together with the owner's manual of your vehicle.
- For inquiries on installation, please consult your dealer or nearest service agent.
- Refer to guidance on attached sheet for inquiry about the product to our company.

Caution

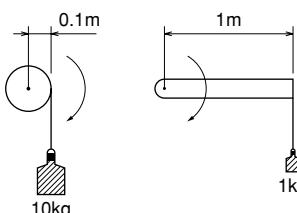
1. When installing in some types of a car, it is necessary to remove the seat belt. It is necessary to mount the bolt which fixes a seat belt by the specified force. For inquiries on torque, please consult your dealer or your car shop.
2. When installing in some types of a car, you have to install using an installation kit. For inquiries, please consult your dealer.
3. Depending on the year or grade of a car, some vehicles may have changed parts. For inquiries, please consult your dealer.

About bolting torque

"The power to twist something" is called "torque."

Two persons grip each end of one bat, and twist in opposite direction, respectively. In this case, the person with the thick bat side is more advantageous.

Thus, even if using the same force, turning something with a large radius will have larger twisting strength, or torque.



[Bolting torque of a screw] ; The power in which an adult tightens a screw normally using an ordinary screwdriver is 1-2N·m (0.1-0.2kgf·m).

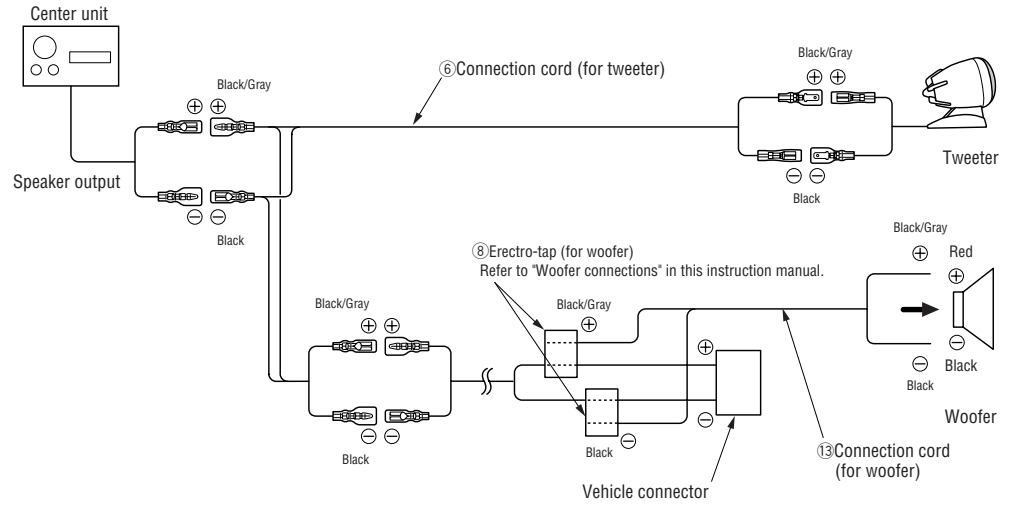
[Bolting torque of a bolt] ; The torque when tightening a bolt by 25kg power using a wrench is 49N·m (5kgf·m).

Both are the same torque, 9.8N·m (1kgf·m).

System connections

Connection example 1

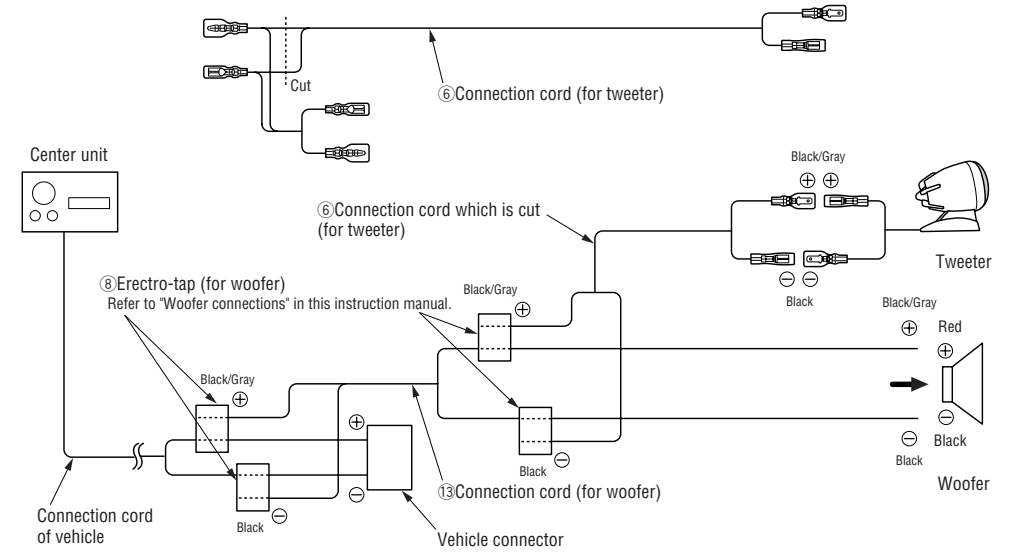
Tweeter connection from center unit. (Tweeter is installed on the dashboard.)



※ The high path filter for a tweeter is built in the main part of a tweeter.

Connection example 2

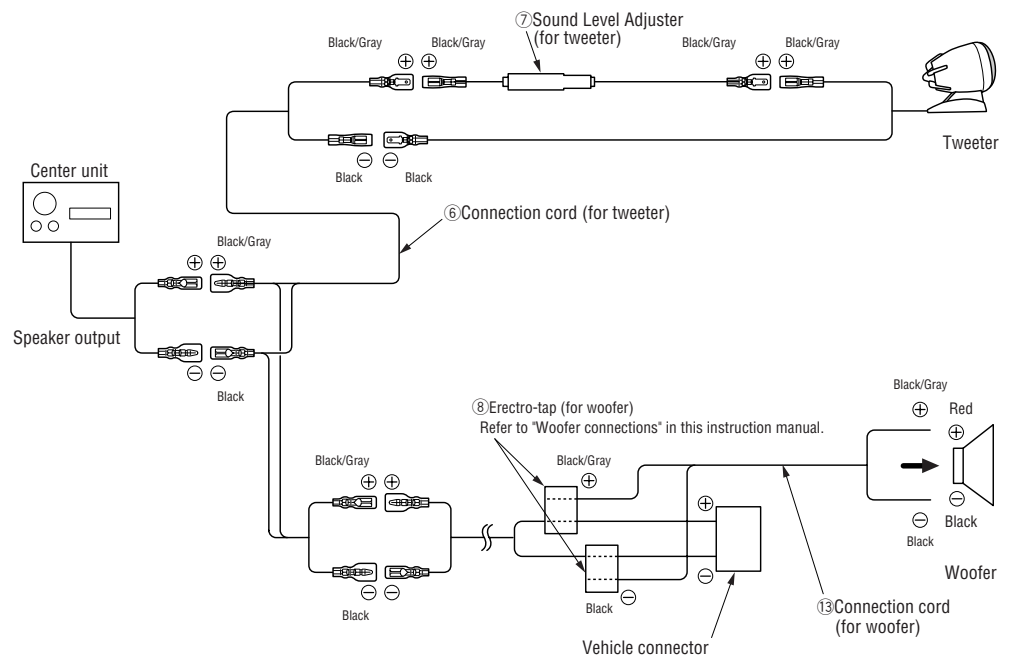
Tweeter connection from woofer. (Tweeter is installed on the door panel.)



※ The high path filter for a tweeter is built in the main part of a tweeter.

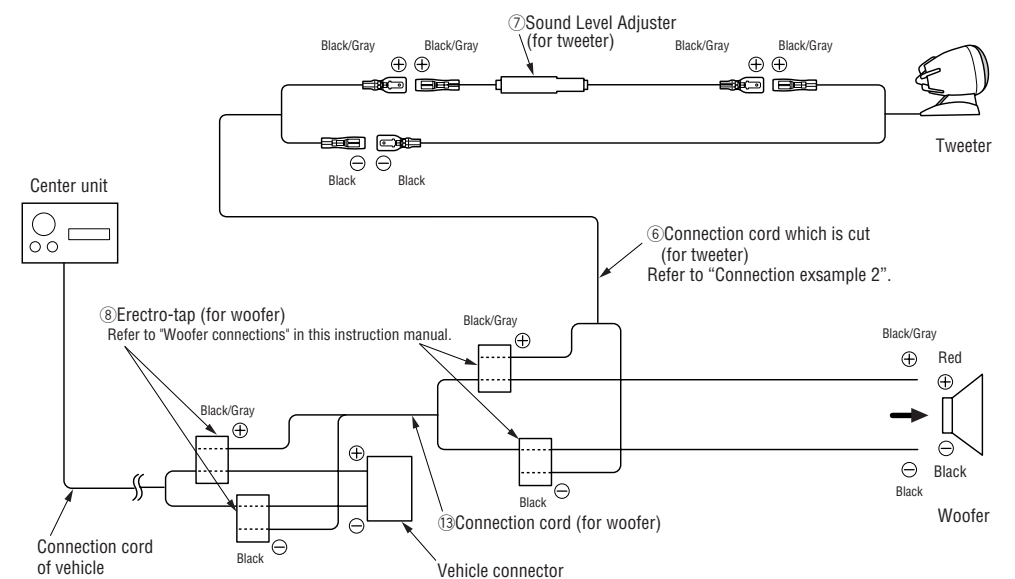
Connection example 3

• If the tweeter level is too high. Tweeter connection from center unit. (Tweeter is installed on the dashboard.)



Connection example 4

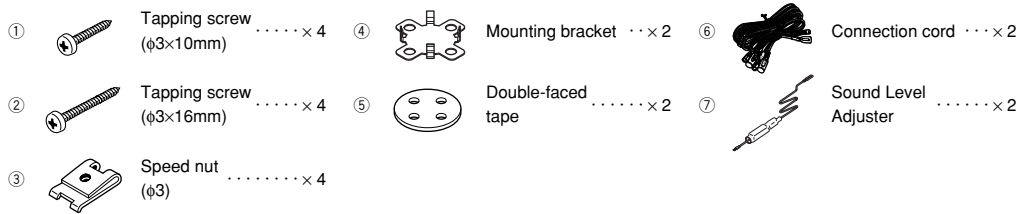
• If the tweeter level is too high. Tweeter connection from woofer. (Tweeter is installed on the door panel.)



Caution

- The terminal which is not used should be protected by electrical tape for shorting accident prevention.
- Be careful of the polarity of plus/minus and connect depending to the connection example.

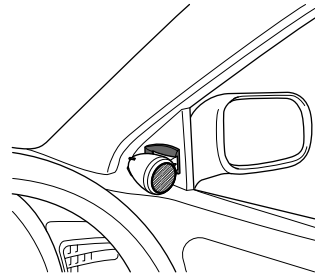
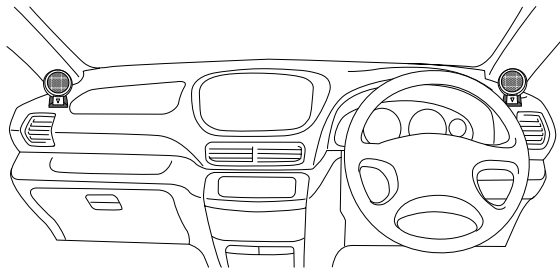
Parts included (for tweeter) • Check that the following parts for the tweeter are provided with the product.



Mounting location for tweeter

1. On the dashboard

2. On the door panel



※ Please face the tweeter on the side of the driver's seat towards the direction of the passenger seat, and face the tweeter on the side of the passenger seat towards the driver's seat side.

※ It may be unable to mount on the door of some vehicle types.

Installation for tweeter

Before work

- Before making holes, check the mounting space with the supplied template (in the inner flap of the carton box).
- To prevent noise pick-up, keep the wiring of this unit away from motors, high voltage leads and other possible noise sources.
- To prevent short-circuiting, keep all wiring away from moving parts, sharp edges, cut metal, etc.
- Do not switch power ON until wiring is completed.

Installation procedure

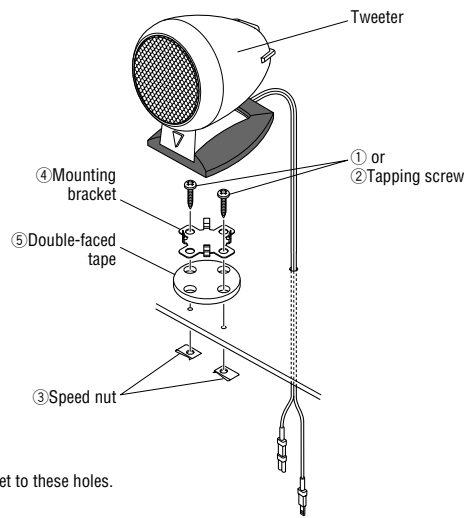
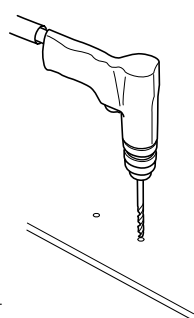
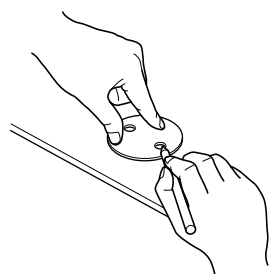
1. Select the mounting position, referring to "Mounting location for tweeter".
2. Place the supplied template on the selected position and mark the hole positions with a felt-tip pen.
3. Cut out a hole for letting the cord pass, and make screw holes in the position of the mark.
4. Install ④ Mounting bracket using ① or ② Tapping screw, ③ Speed nut and ⑤ Double-faced tape.
5. Join the projections of ④ Mounting bracket to the holes at the bottom of a tweeter.

Installation

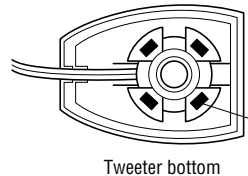
1. Select the mounting position.

2. Make holes.

3. Mount tweeter.



Set the arrow of the template in the direction of sound.



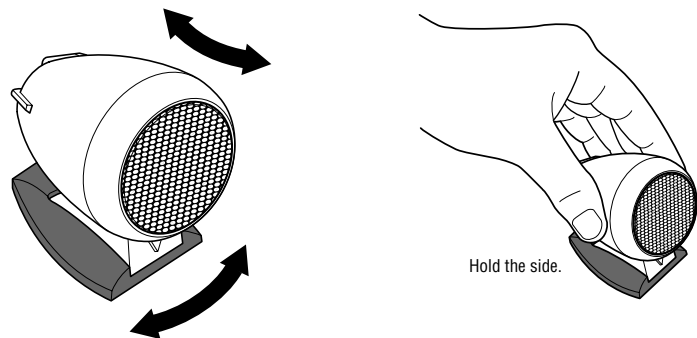
Join the projections of ④ Mounting bracket to these holes.

Caution

- Install the tweeter so that it will not come in contact with the window glass etc.
- When you check the mounting space, check that there is no contact by opening and closing of a door, or no interference with safeguards, such as an air bag.
- Be careful not to damage the tank and hose, in the case of processing work.
- Do not install the tweeters in locations which may be subject to water or hot air.
- Fix the tweeter in a position which does not hinder the driving operations.
- Do not use any parts other than specified. (Otherwise imperfect installation may cause the tweeter installation to loosen, and cause it to drop.)

Angle adjustment

- After installation, you can adjust direction of this tweeter to an optimum angle for better music reproduction. As shown in figure, hold the side of the tweeter, change direction of the tweeter slowly, and decide the direction with the best balance of L and R.



Caution

- Do not adjust to an impossible angle.
- Do not hold front side or cord of the tweeter when adjusting.
- The tweeter adjustment should be operated after having stopped the vehicle at a safe place.

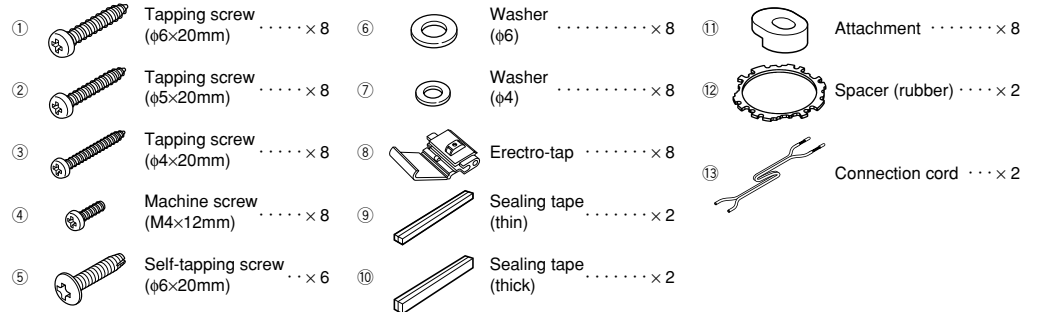
※ Frequent direction adjustment and impossible adjustment may not maintain direction of the tweeter.

Warning

- When a vehicle has been left under direct sunlight, the surface temperature of the tweeter may rise to a considerable level. Keep in mind that there is danger of a burn if it is touched.

※ Decrease enough the internal temperature of a vehicle before adjusting.

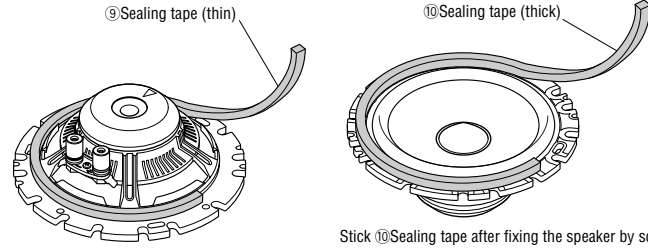
Parts included (for woofer) • Check that the following parts for the woofer are provided with the product.



Installation preparation

※ Stick ⑨ and ⑩ Sealing tape, in order to prevent vibration and leak.

- Stick ⑨ and ⑩ Sealing tape



Stick ⑩ Sealing tape after fixing the speaker by screws.

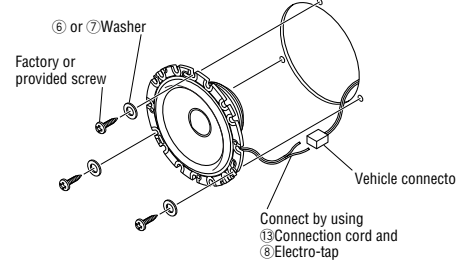
! Be sure to install product using provided sealing tape. Installing without using sealing tape may cause water leak into a vehicle.

Mounting location for woofer

※ Refer to "Woofer connections" for the connection of vehicle connector and ⑬ Connection cord.

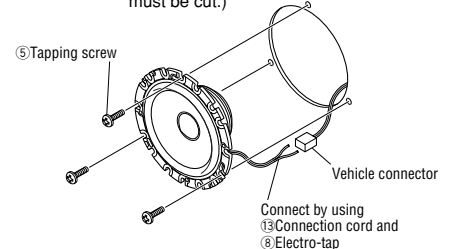
Installation example A

Depending on vehicle type, you may install using ⑥ or ⑦ Washer.



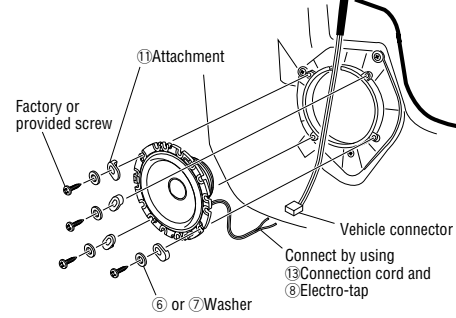
Installation example B

Depending on vehicle type, you may install using ⑤ Tapping screw. (When the factory speaker is being fixed by rivets, the rivets must be cut.)



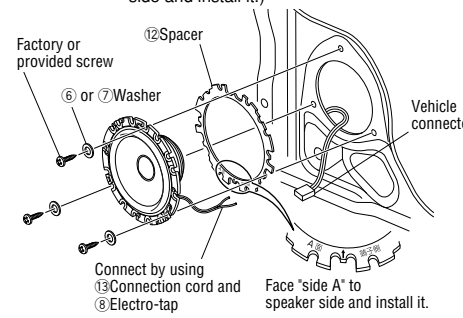
Installation example C

Depending on vehicle type, you may install using ① Attachment.



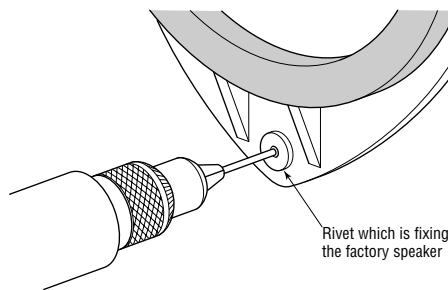
Installation example D

Depending on vehicle type, you may install using ⑫ Spacer. (Face "side A" to speaker side and install it.)



Removal of rivet

- When the factory speaker is being fixed by rivets.



A rivet is removed by making a hole in the lock portion (the central portion) of it with a drill.

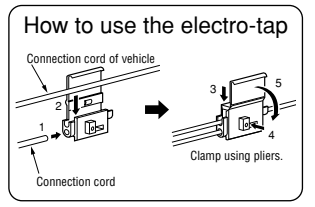
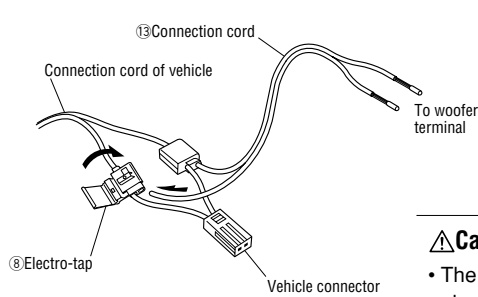
- ※ Also remove the fragment of the rivet.
- ※ The removed rivet cannot be re-used.

Caution

- If the metal part of a door is deformed, the diameter of the screw hole becomes large and it becomes impossible to install the woofer.

Woofer connections

- Connection of vehicle connector and ⑬ Connection cord. Connect using ⑧ Electro-tap.



※ Make each polarity (⊕, ⊖) match and connect.

Caution

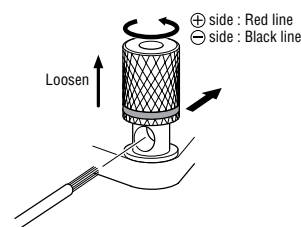
- The terminal which is not used should be protected by electrical tape for shorting accident prevention.

- Connection to woofer terminal

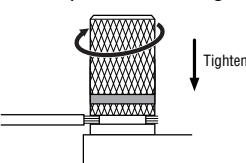
1. Remove insulation cover of cord.



2. Loosen the cap of terminal and pass cord through the hole.



3. Close the cap of terminal tightly.



Caution

- Connect so that the tip of the connection cord does not contact metal portions other than terminal.
- Tighten firmly so that the connection cord does not come off, while driving vehicle.

About polarity (⊕, ⊖)

Connecting with the wrong speaker polarity will not reproduce with the right sound stage. Be careful of the polarity and connect properly.