

SRS - Air bag

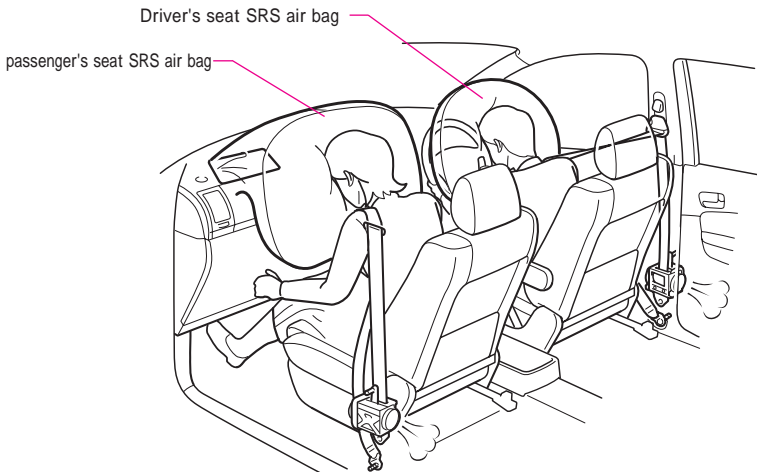
What is the SRS air bag?

Wearing a good posture and a correct seat belt is absolutely conditions for the SRS air bag to demonstrate the effect of the SRS air bag by the one to assist the seat belt to the last with the auxiliary equipment of the crew protection.

Moreover, the effect might not only be demonstrated when an effective SRS air bag also does wrong handling if it correctly handles it but also the danger of injury or the death is rather given to the crew.

Dual SRS air bag

SRS dual (driver's seat and passenger's seat) air bags are the one that it swells when the high impact for the grievous harm to reach those who drive or passenger's seat crew is received forward of the vehicle, and working to make the impact that acts on crew's head and chest, etc. along with working to which the seat belt restrains the body distribute and eased is done.



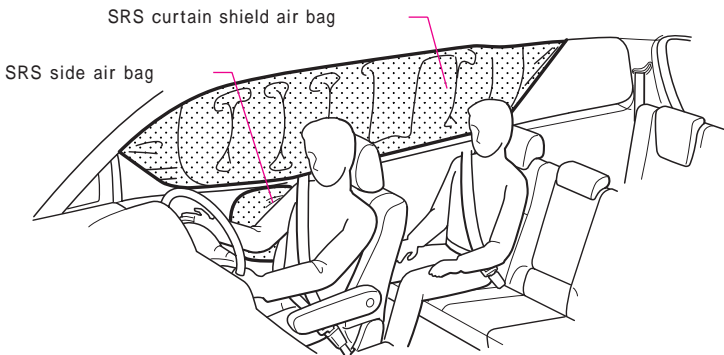
- "Crew protection auxiliary equipment" is meant by abbreviating Supplemental Restraint System.



SRS side air bag & SRS curtain shield air bag *

The SRS side air bag and the SRS curtain shield air bag on the side where the impact was received swell when the SRS side air bag and the SRS curtain shield air bag receive the high impact for the grievous harm to reach the crew in a reception desk seat and Secandoshet right and left seat from the side to the vehicle guest room. The SRS side air bag along with working to which the seat belt restrains the body works to make the impact power that the reception desk seat and the Secandoshet right and left seat crew chiefly act on the head as for the SRS curtain shield air bag distribute and eased in the upper part of the body such as reception desk seat crew's chests.

The SRS side air bag and the SRS curtain shield air bag swell even if there is no crew.

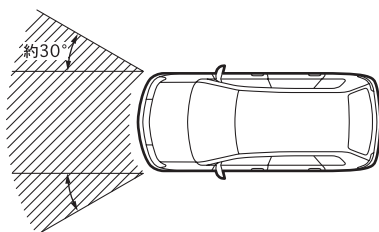


Mechanism of operation of SRS air bag

● Operation of dual SRS air bag

Operate when you receive the high impact for the grievous harm to reach the crew from the direction within about 30. in a vehicle forward right and left.

The impact makes a signal to the computer to perceive with the sensor installed in a forward of the vehicle and a vehicle central floor, and to swell the SRS air bag, and the SRS air bag operates.



The sensor cannot normally perceive the impact when the grill guard etc. are installed forward of the vehicle, and normal operation of the SRS air bag might be ruined.

● Operation * of SRS side air bag & SRS curtain shield air bag

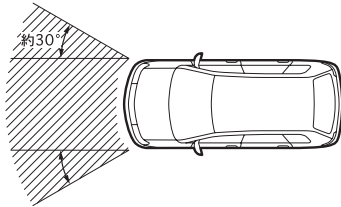
Operate when you receive the high impact for the grievous harm to reach the crew from the direction of the vehicle side.

The impact makes a signal to the computer to perceive with the sensor installed outside of a central pillar central floor, and to swell the SRS air bag, and the SRS air bag operates.

When the SRS air bag operates

It operates when there is a high impact to which the crew who has correctly worn the seat belt might receive important injury, and it is not easy to operate by the impact with a little fear to receive important injury.

When operating



Operate when you receive the high impact for important injury to reach the crew from the direction of about 30. or less in a vehicle forward right and left.

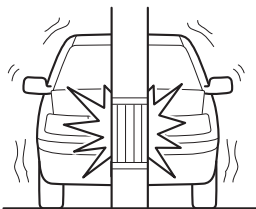
When it is not easy to operate

- Dual SRS air bag

When the impact that the following bodies receive is weak, it is likely not to operate.



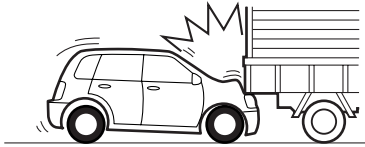
- It is likely ..hard wall like concrete that transforms and doesn't move.. not to operate at the time of about 30 km/h or less in collision speed even in case of it is time when is a head-on collision when colliding.



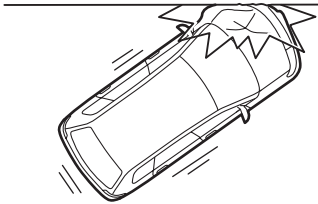
- It is likely not to operate when the collision speed is about 35 km/h or less even in case of it is time when is a head-on collision within the narrow ranges such as utility poles and trees that transform and do not move when colliding.



Because the impact by the collision is loosened in the following cases, it is likely not to operate.

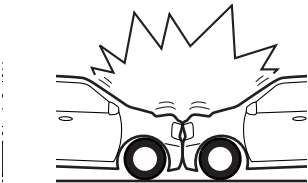


- When the under of the carrier of the track etc. slip and it collides.

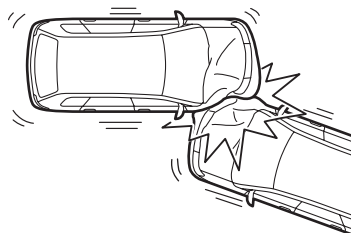


- When you receive the impact from the person before the diagonal.

The operating velocity of the car rises because the impact by the collision is loosened when colliding what is transformed or moves.



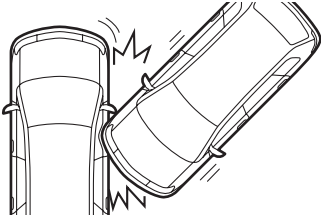
- For instance, it is likely not to operate even in case of the speed at about 60 km/h when colliding from the front with the car of the weight of this extent under the stop. -



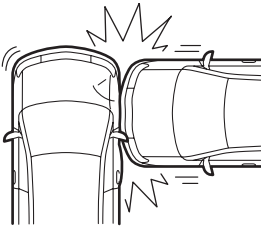
- When even the speed is higher, it is likely not to operate according to the direction of the collision (angle) and the one side collision (offset collision), etc.

- SRS side air bag and SRS curtain shield air bag

When the impact that the following bodies receive is weak, it is likely not to operate.



- When you receive the impact from a diagonal side.



- When you receive the impact to sides other than the guest room.

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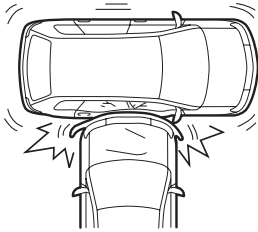
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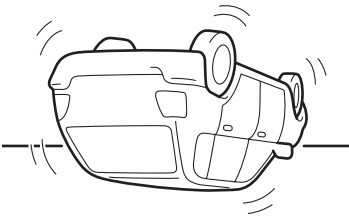
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☾ When you do not demonstrate an original effect

Do not demonstrate an original effect though it is likely to operate in the following cases.



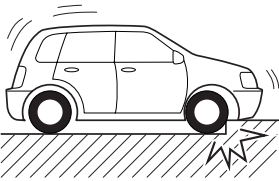
- When you receive the impact from the side and the rear side.



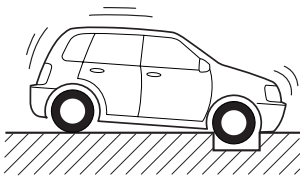
- When the vehicle turns sideways and is overturned.

☾ When you receive the collision under the vehicle

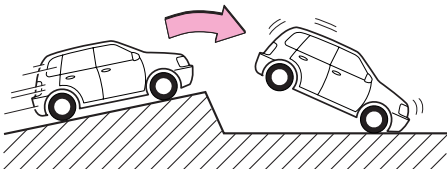
When the high impact is received under the vehicle the following, it is likely to operate.



- When knocking against the curb etc.



- When it falls in the deep hole and the ditch or it gets it over.



- Jumping when knocking against ground or falling from the road.



Guard the following items to demonstrate the effect of the SRS air bag enough.

- The SRS air bag is a device that assists the seat belt, and no one to take the place of the seat belt.

Guard the following when you get on. In the worst case, the effect of the SRS air bag is not able not only to be demonstrated enough when colliding if it doesn't defend but also it reaches important injury by a strong impact when the SRS air bag swells or, it is likely to lead to the death.

蘆Wear the seat belt correctly. The SRS air bag swells at the same time as being thrown out forward with a rapid brake etc. if the seat belt has not been worn, the high impact is received, and it is dangerous. Refer to P.196 for a correct wearing the seat belt.

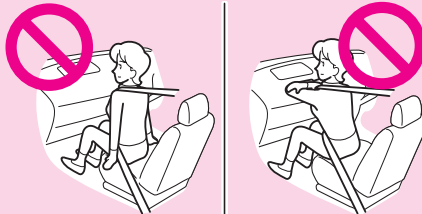
蘆Adjust the seat at a correct position, and sit on the seat by correct posture that the back also applied the back to the drip. The high impact is received when the SRS air bag swells when getting on by posture that approaches the SRS air bag too much and it is dangerous.

< driving person's person >

Make it not approach the steering wheel too much as much as possible within the range where the driving operation can be done and sit.

< passenger's seat crew's person >

Sit on one after it parts from passenger's seat SRS air bag as much as possible. Do not sit on the former edge of the seat, and do not lean against the Instrument panel. Adjust the seat, and refer to P.155 for correct driving posture.



蘆Neither SRS side air bag installation car nor the SRS curtain shield air bag installation car starts must not leaning against the door, and must approach the reception desk center rear pillar, the roof side part, and the ceiling. When the SRS side air bag and the SRS curtain shield air bag swell, the high impact might receive the important injury related to the receiving life and is dangerous in the head etc. Especially, be careful when the child is taken.





Guard the following items to demonstrate the effect of the SRS air bag enough.

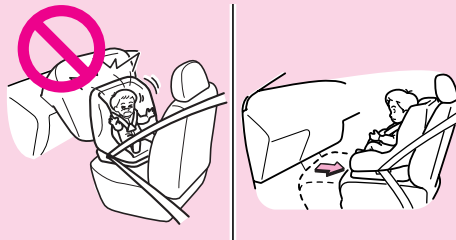
Do not run with the one put as the one is held on the knee between the crew and the SRS air bag. It flies the one when the SRS air bag swelled and it strikes the face, and normal operation of the SRS air bag is disturbed and it is dangerous. -

Guard the following when you take the child. In the worst case, it reaches important injury if it doesn't defend by a strong impact when the SRS air bag swells or, it is likely to lead to the death.

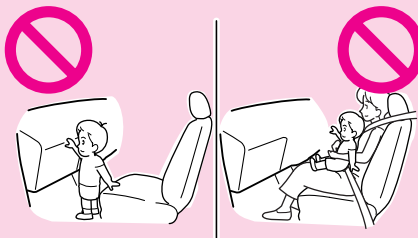
The child must make it sit on the rear seat, and let me wear the seat belt.

Install the seat only for the child in the rear seat and use it for a small child who cannot correctly wear the seat belt.

Never install the seat only for the child in the passenger's seat for. The high impact joins the back of the seat only for the child when passenger's seat SRS air bag swells and it is dangerous. ..adjustment position.. install most before and behind the seat when it unavoidably keeps positive and the seat only for the child is installed in the passenger's seat.



Do not run in the state that makes the child stand in front of passenger's seat SRS air bag, and holds on the knee.





Guard the following items to demonstrate the effect of the SRS air bag enough.

- Guard the following at the maintenance work of the vehicle. The SRS air bag might not operate normally, and it reaches important injury by swelling by mistake or, in the worst case, it lead to the death if it doesn't defend. Consult the Toyota shop when these work is necessary.

蘆Do not detach, do not install, do not take the SRS air bag and the Instrument panel apart, and do not repair.



蘆Consult the Toyota shop about the SRS side air bag installation car when detaching, the installation, the resolution, and the repair, etc. of repapering and the reception desk seat of the epidermal of the reception desk seat are necessary. Moreover, do not remodel the reception desk seat.

蘆The SRS curtain shield air bag installation car must not resolve and not repair the detaching surrounding of the reception desk center rear pillar, the roof side part, and the ceiling of the SRS of the installation etc. curtain shield air bag development department.



蘆Do not remodel the suspension. Height changes or the hardness of the suspension changes, and it causes the mis-operation of the SRS air bag.

蘆Do not repair the front of the vehicle or the vehicle guest room. The impact transmitted to the SR S air bag sensor changes if an improper repair is done, and the SRS air bag doesn't operate normally.

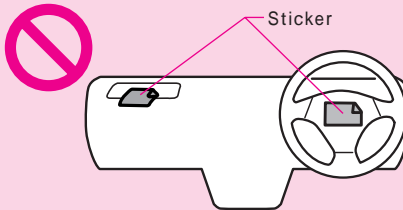




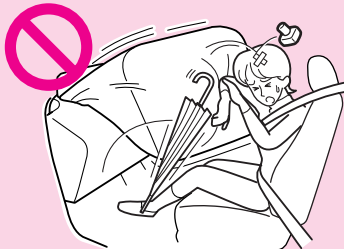
Guard the following items to demonstrate the effect of the SRS air bag enough.

- Guard the following when you install the car articles etc. The SRS air bag might not operate normally, and it reaches important injury by swelling by mistake or, in the worst case, it lead to the death if it doesn't defend.

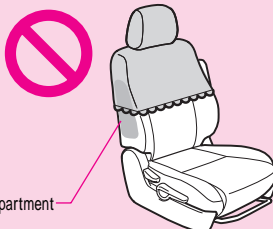
蘆Do not cover the development department of the SRS air bag with the cover and the sticker, etc.



蘆Do not put the one of the aromatic substance etc. on the Instrument panel, and do not lean the umbrella etc. It flies when passenger's seat SRS air bag normally is not operated or swells and is dangerous.



蘆The SRS side air bag installation car must not install the one other than a Toyota pure articles (seat cover etc.) only for this car in the reception desk seat. If the SRS side air bag development department is covered with the one other than a Toyota pure articles only for this car, it becomes an obstruction of normal operation of the SRS side air bag. Often read the manual of the attachment, and install it in the commodity correctly when you install the Toyota pure seat cover etc.

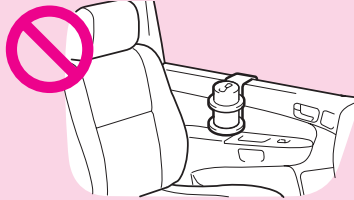


SRS side air bag development department

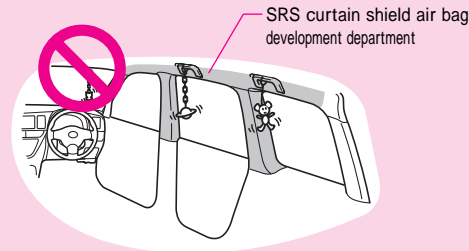


Guard the following items to demonstrate the effect of the SRS air bag enough.

蘆The SRS side air bag installation car must not install the car articles such as the cup holders in the reception desk door and the circumference. It flies when the SRS side air bag swells and is dangerous.



蘆The SRS curtain shield air bag installation car must not install accessories hands-free mike suspenders etc. around the SRS curtain shield air bag development department such as the reception desk window glass, the side door glass, the reception desk center rear pillar, the roof side part, assist grip, and ceilings. It flies when the SRS curtain shield air bag swells and is dangerous.



蘆The electric wave etc. of the wireless machine might negatively affect the computer that operates the SRS air bag, and consult the Toyota shop when you install the wireless machine etc.

蘆Consult the Toyota shop when you install the grill guard and the winch, etc. in the front of the vehicle. The impact transmitted to the SRS air bag sensor changes if the front of the vehicle is remodeled, and it causes the mis-operation of the SRS air bag. -

The SRS air bag development department such as the upper part of the steering wheel pad Instrument panel must not be overpowered as the strong beating etc. The SRS air bag doesn't operate normally, and it reaches important injury or, in the worst case, it is likely to lead to the death. -

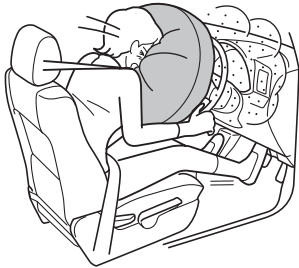
It is not necessary to touch the SRS air bag composition parts immediately after the SRS air bag's having swollen. Important injury such as the burns might be received because complete parts are very hot and it is dangerous.





There is even when the SRS air bag operates normally in the following cases.

- Because the SRS air bag swells at a very fast speed, the bruise file wound etc. might be received by contact with the SRS air bag.



- No fire though the gas like white smoke is generated with the operation sound if the SRS air bag operates. If this gas is breathed in, the person who has details for the respiratory system such as asthma to suffer becomes painful breath occasionally.

In this case, confirm it is safe even if the crew goes out outside the car, and go out outside the car. Open the window and the door and put fresh air when it is not possible to go out outside the car.

Moreover, flush it in water as soon as possible when traces (Cas etc.) when the SRS air bag operates adhere to eyes and the skins. The person to whom the skin is weak occasionally stimulates his skin unusually. -

The reception desk window glass of the vehicle might be damaged by passenger's seat SRS air bag's swelling when colliding. -

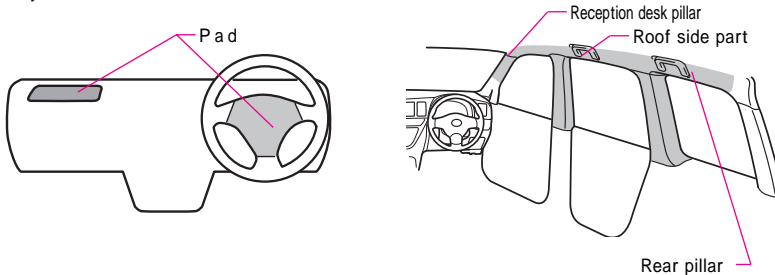
The SRS air bag that operates once doesn't operate again in the collision since the second times. Exchange it in the Toyota shop. The SRS air bag doesn't operate in the second collision if the SRS air bag operates by the first collision when colliding similarly continuously. -

Consult the Toyota shop when you abandon the car and the SRS air bag. The SRS air bag operates unexpectedly, and it is likely to injure.



There is even when the SRS air bag operates normally in the following cases.

- Do not use as it is and exchange it in the Toyota shop when the pad, the reception desk rear pillar, and the roof side part where the SRS air bag is stored have been damaged or there is a crack. When colliding, the SRS air bag normally doesn't operate, and be likely to be injured.



- The fuel pump control must operate, stop the fuel supply, and suppress the fuel leakage to the minimum when the engine stops and the SRS air bag operates.
Return LOCK the engine switch once after confirming there is no fuel leakage enough when you release the stop of the fuel supply.



Seat belt relation

Working of seat belt

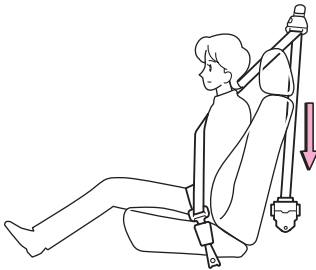
Pretensioner & Seat belt with force limiter

Reception desk seat belt

- The pretensioner mechanism winds up the seat belt instantaneously when the high impact for the grievous harm to reach the crew in the front seat is received forward of the vehicle, and secures an appropriate effect of the crew restraint. -

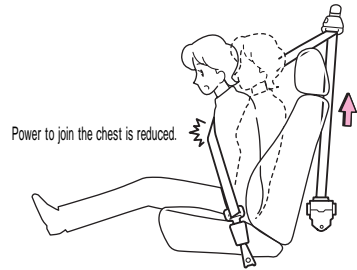
The force limiter mechanism eases the impact to the chest by maintaining the load of the seat belt to a regulated value.

Pretensioner mechanism



. It is necessary to wind up to the first stage of the collision up the seat belt instantaneously .

Force limiter mechanism



. Draw out the seat belt while maintaining the specified load when colliding .

Seat belt with ELR mechanism

The belt is automatically locked and fix the body when the body seems to fall forward in the high impact though the seat belt expands and contracts according to the movement of the body.



Guard the following when you wear the seat belt with the pretensioner.

- Guard the following when you wear the seat belt with the pretensioner. The effect with an enough pretensioner is not demonstrated if it doesn't defend, and it reaches important injury or, in the worst case, it is likely to lead to the death.
 - 蘆Wear the seat belt correctly. (Refer to P.196.)
 - 蘆Adjust the seat at the position in which correct driving posture can be taken. (Refer to P.155.)
- Do not install, do not detach of the seat belt with the pretensioner, and do not take it apart. Moreover, go in the Toyota shop when you repair the seat belt with the pretensioner. It doesn't operate normally, and it winds up by mistake, and it reaches important injury or, in the worst case, it is likely to lead to the death when the seat belt with the pretensioner is inadequately handled.



The seat belt with the pretensioner cannot be used again.

- The seat belt with the pretensioner cannot be used again when operating once. It is not possible to draw out, to wind up up the seat belt when operating, and to exchange it in the Toyota shop. The pretensioner doesn't operate in the second collision if the pretensioner operates by the first collision when colliding similarly continuously. -
No fire though the gas like white smoke is generated with the operation sound if the seat belt with the pretensioner operates. Moreover, there is not an influence on the human body either. -
Consult the Toyota shop when you abandon the seat belt with the car and the pretensioner. The seat belt with the pretensioner operates unexpectedly, and it is likely to injure.



Knowledge

About the operation condition of the seat belt with the pretensioner

The seat belt with the pretensioner operates when the high impact is received forward of the vehicle. It is likely not to operate when the following impacts are weak. -

To a concrete wall at the head-on collision at the speed at about 30 km/h or less.

Do not demonstrate an original effect though it is likely to operate in the following cases. -

When you receive the impact from the side and the rear side. -

When the vehicle turns sideways, and is overthrown.

