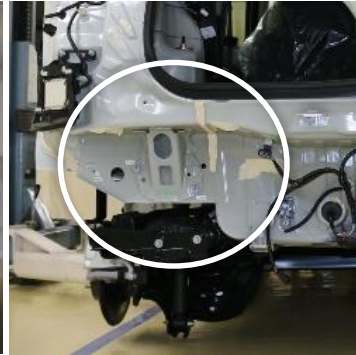


DET Supplemental Document

## **RB3-1 Rear Crush Box**

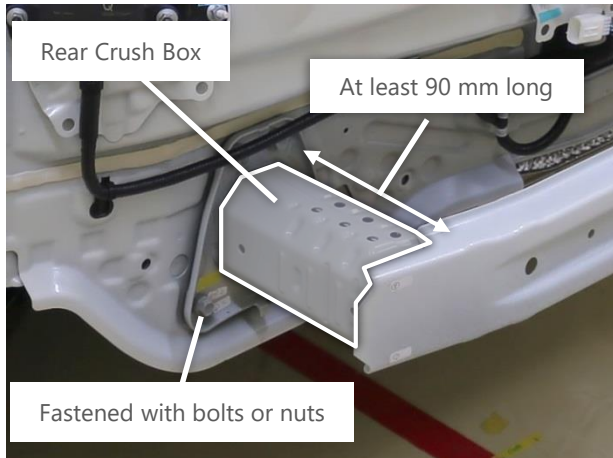
# Condition

- Vehicle : All vehicles
- Part and Structure : Rear Cush Box
  - ☞ A box-like component mounted at the rear of the vehicle on the Rear Side Member extended line is identified as the Rear Crush Box.
  - ☞ Include the presence or absence of the Rear Crush Box.



# Criteria

The Rear Crush Box should be fastened with bolts or nuts, and should be at least 90 mm long.

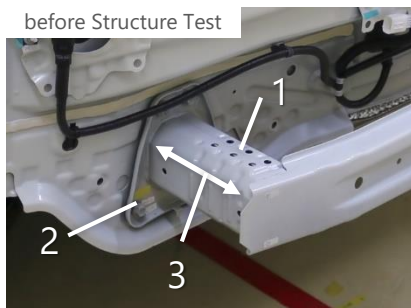


1. Presence or absence of Rear Crush Box
2. Fastening of Rear Crush Box
3. Length of Rear Crush Box

# Reason

When the Rear Crush Box is fastened with bolts or nuts to facilitate replacing the Crush Box after a collision, man hours for the repair work can be reduced.

When the length of the Crush Box is 90 mm or longer, it can provides sufficient energy absorption capability and helps prevent damage from spreading to the Rear Side Member on the Structure Test.

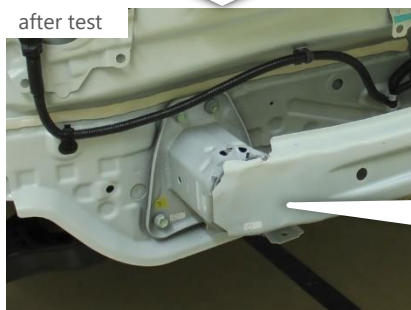


## 1. Example where the Crus Box is attached

The Crush Box was attached and prevented damage from spreading to the Rear Side Member due to absorbing crash energy on the Structure Test.

## 2. Good Example of fastening of the Crush Box

The Crush Box is fastened only with bolts, which facilitate replacing it when damaged.

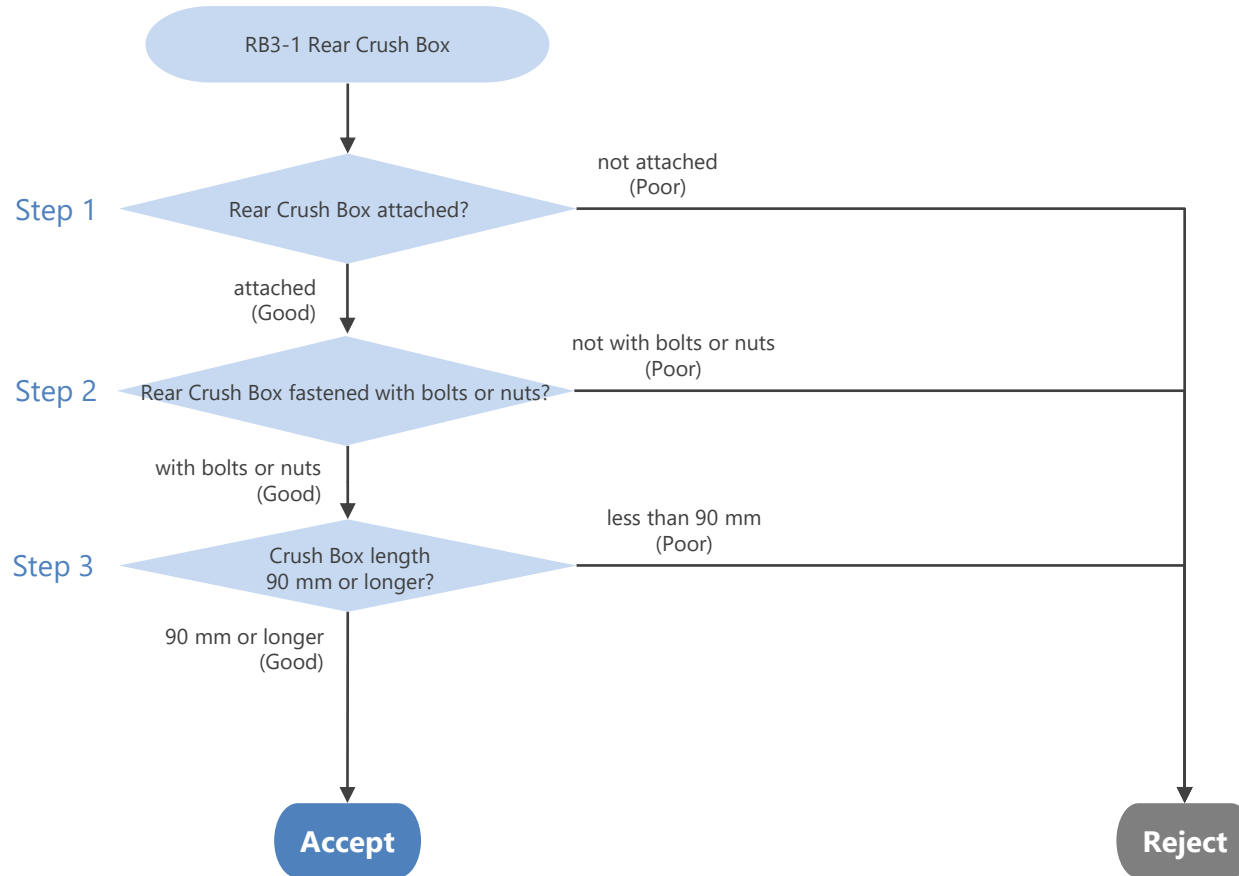


## 3. Example of enough length of the Crush Box

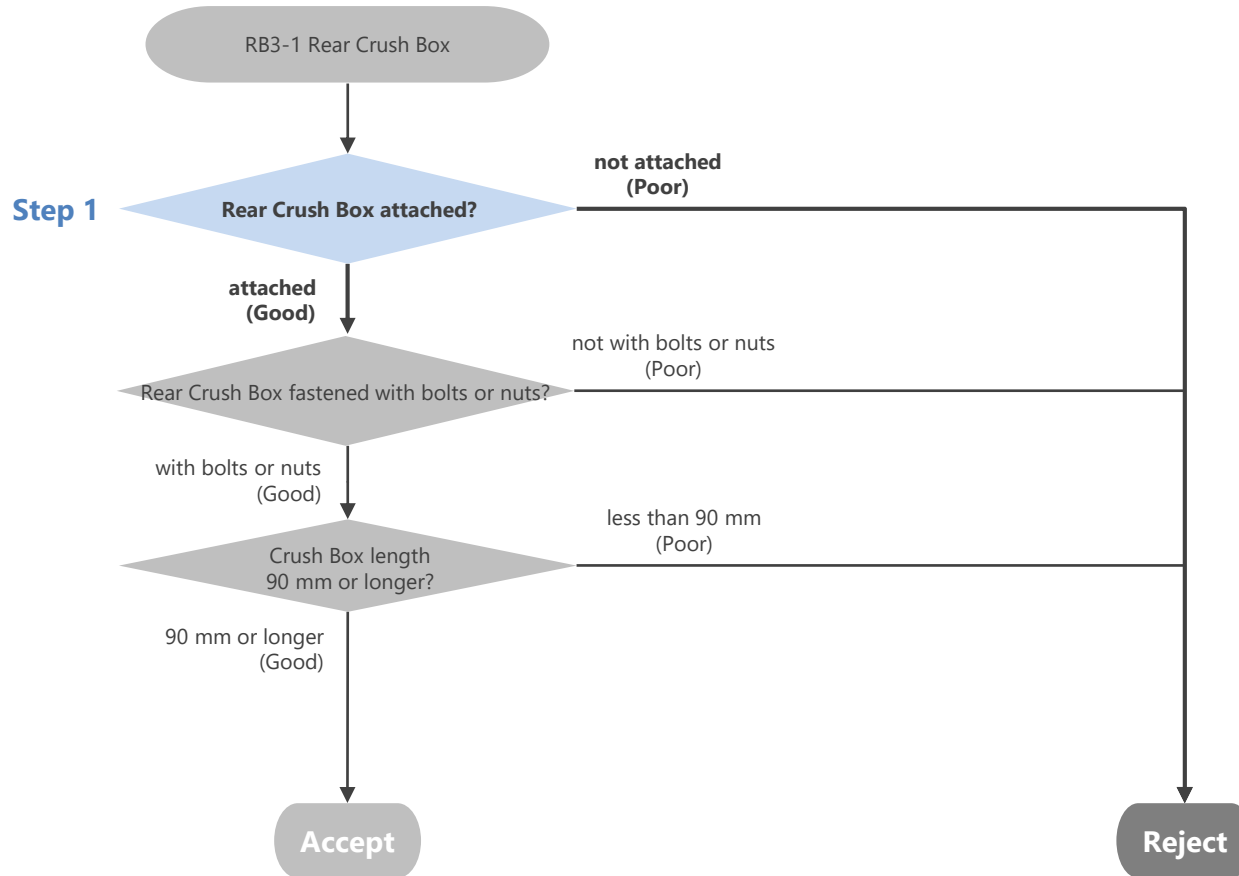
The length is longer than 90 mm. Therefore damage to the Side Member did not occur.

Crush Box absorbed energy,  
no damage to Side Member

# Check Flow



# Check Flow – Step 1



# Check – Step 1

Check if the Rear Crush Box is attached.

【Determination】

**Good**



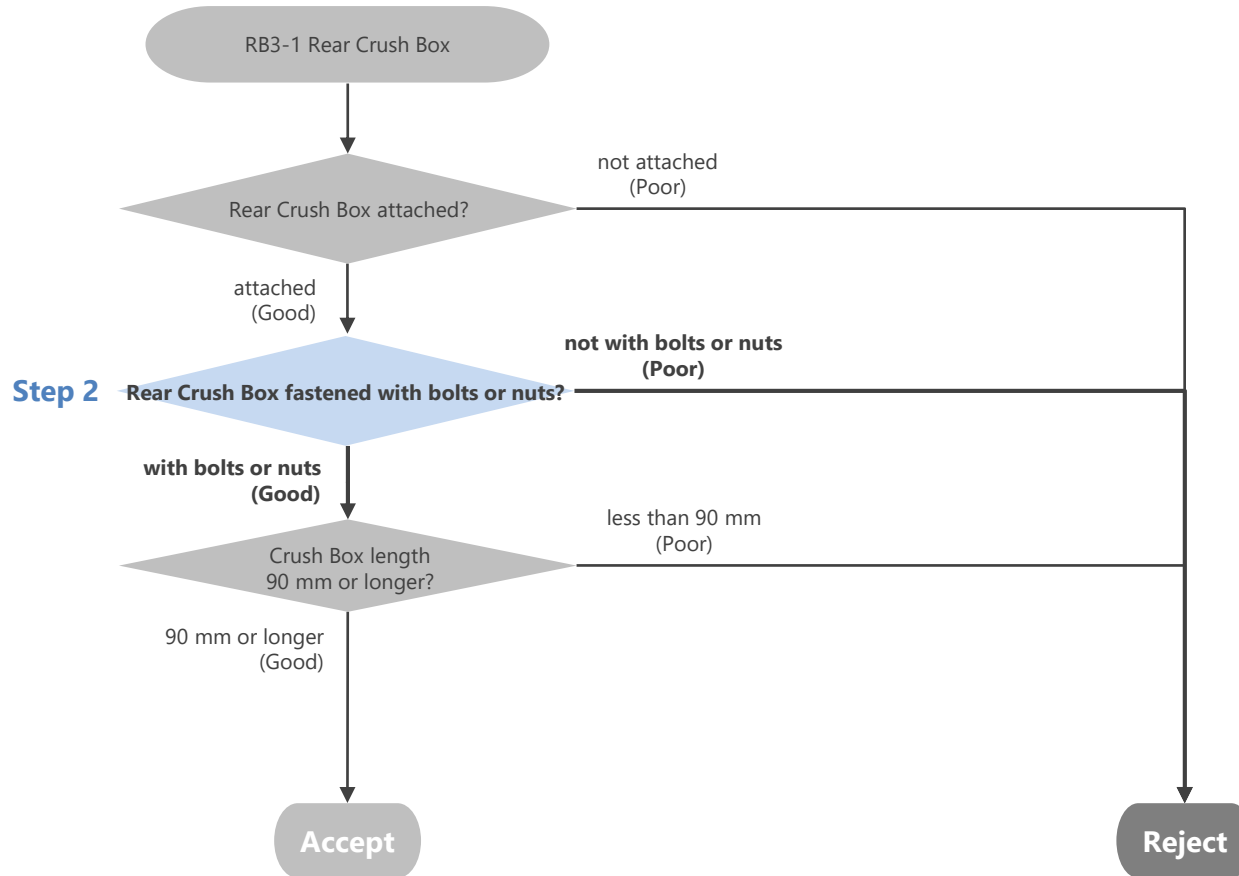
➡ When the Rear Crush Box is attached, it is determined as Good.

**Poor**



➡ When the Rear Crush Box is not attached, it is determined as Poor and **Reject**

# Check Flow – Step 2



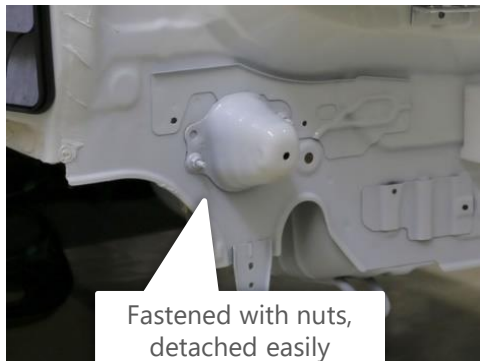


# Check – Step 2

Check if the Rear Crush Box is fastened only with bolts or nuts.

【Determination】

**Good**



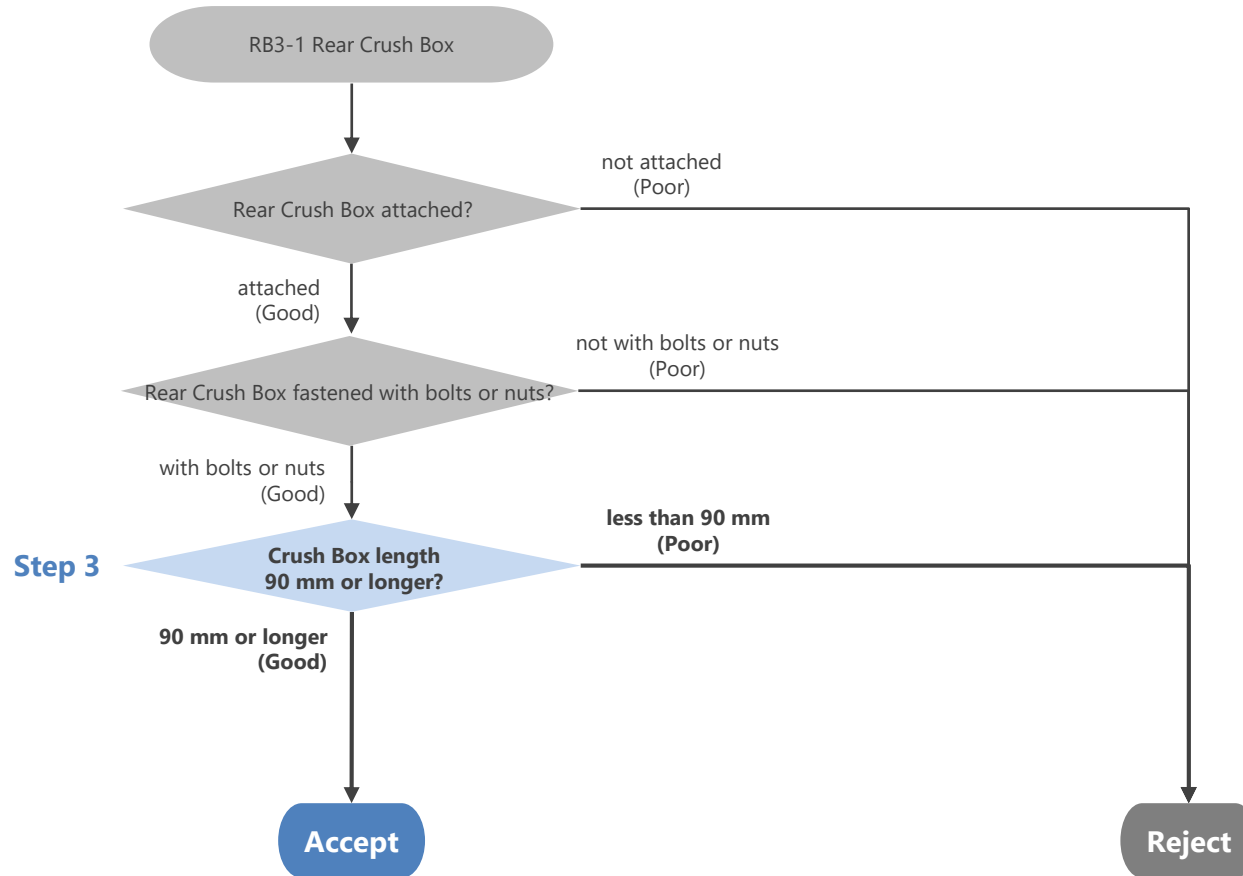
☞ When the Rear Crush Box is fastened only with bolts or nuts, it is determined as Good.

**Poor**



☞ When the Rear Crush Box is not fastened only with bolts or nuts, (e.g. welded to the body), it is determined as Poor and **Reject**

# Check Flow – Step 3

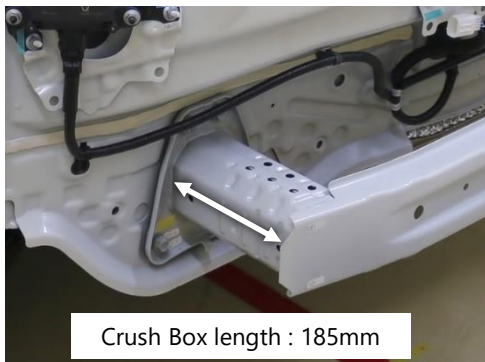


# Check – Step 3

Check if the length of the Rear Crush Box is 90 mm or longer.

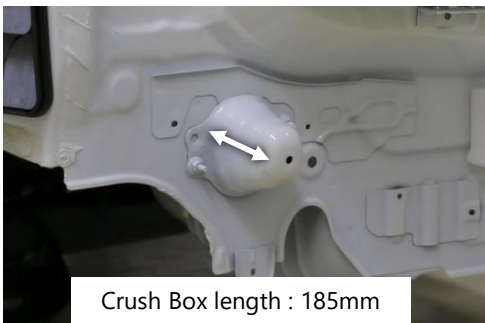
## 【Determination】

### Good



☞ When the length of the Rear Crush Box is 90 mm or longer, it is determined as Good and **Accept**

### Poor



☞ When the length of the Rear Crush Box is shorter than 90 mm, it is determined as Poor and **Reject**