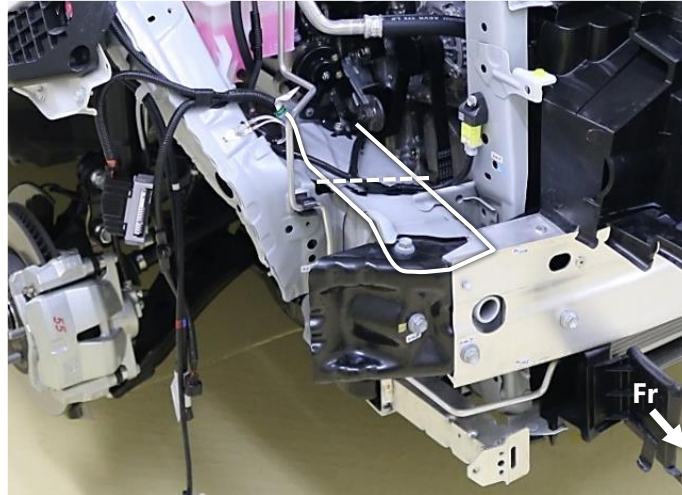


DET Supplemental Document

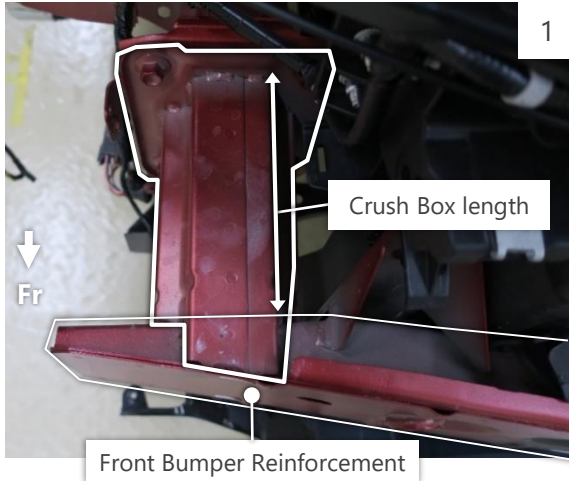
**FS5-1 Front Side Member**

# Condition

- Vehicle : All vehicles
- Part and Structure : Front Side Member and Front Crush Box

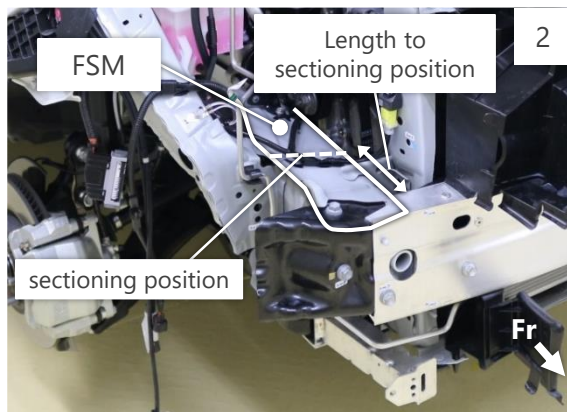


# Criteria



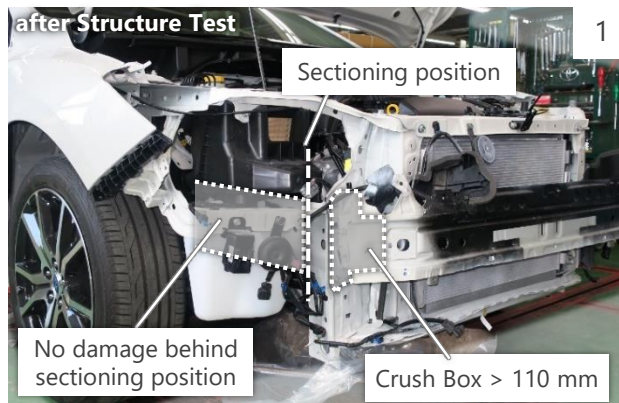
Sectioning of the Front Side Member (FSM) should be officially offered, and one of the following conditions should be also met to prevent damage to the rear of the semi-cut position.

1. For the FSM with the Crush Box attached with bolts or nuts  
The length of the Crush Box should be 110 mm or longer.



2. For the FSM other than 1  
The length from the tip of the FSM to the sectioning position should be 200 mm or longer.

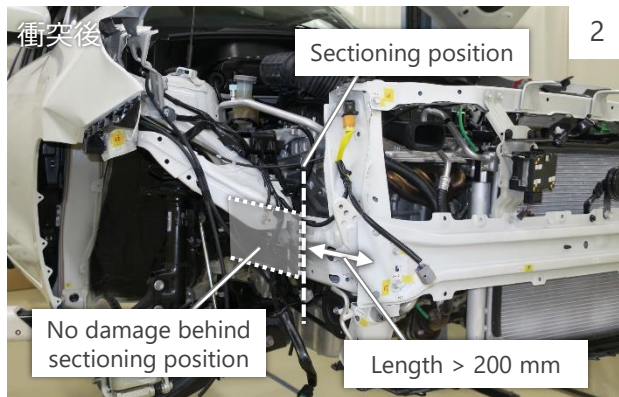
# Reason



## 1 . Good example of the FSM with Crush box attached with bolts

The length of the Crush Box was longer than 110mm.

There was damage only at the tip of the FSM and no damage behind its sectioning position.

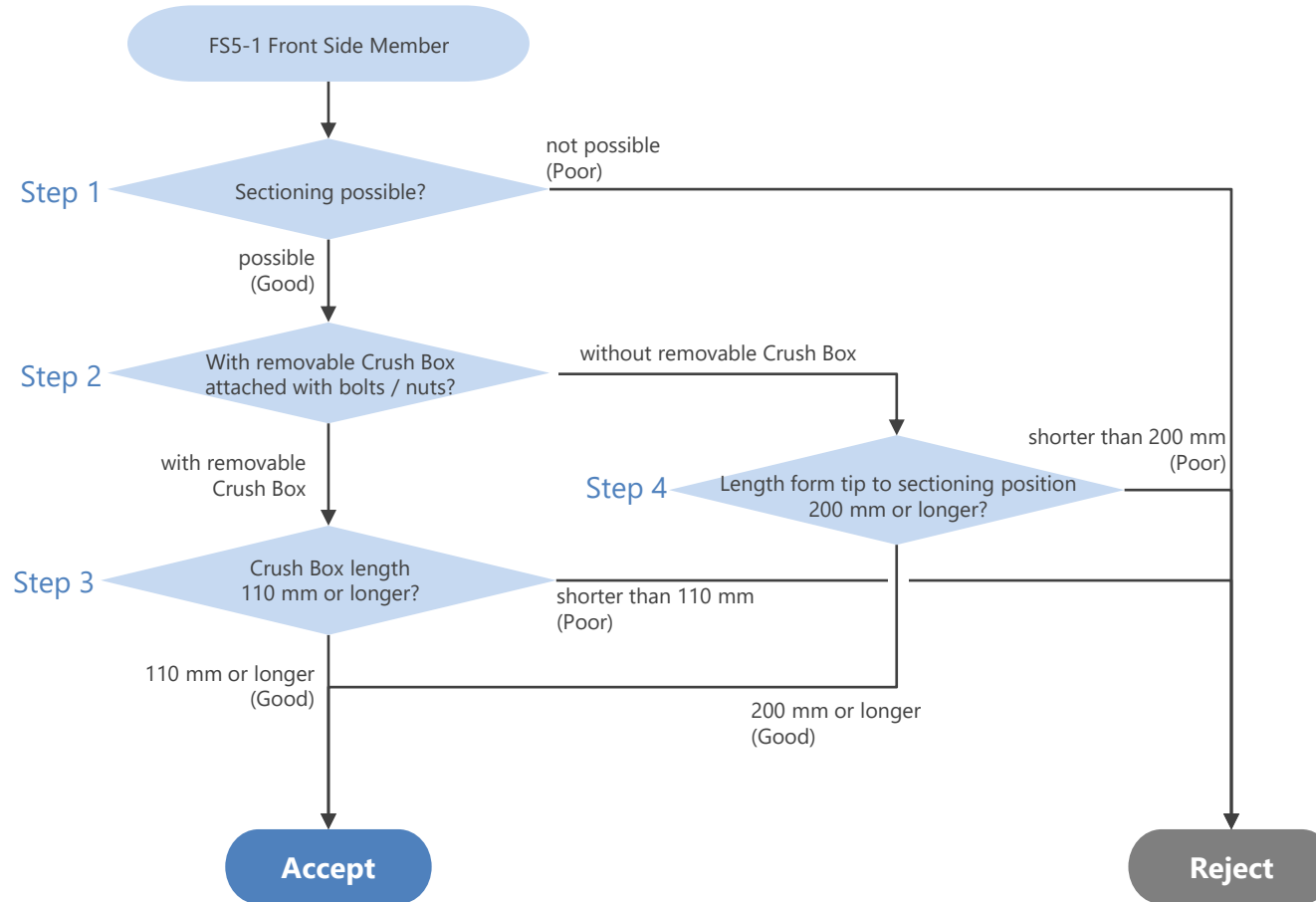


## 2 . Good example of the FSM other than 1.

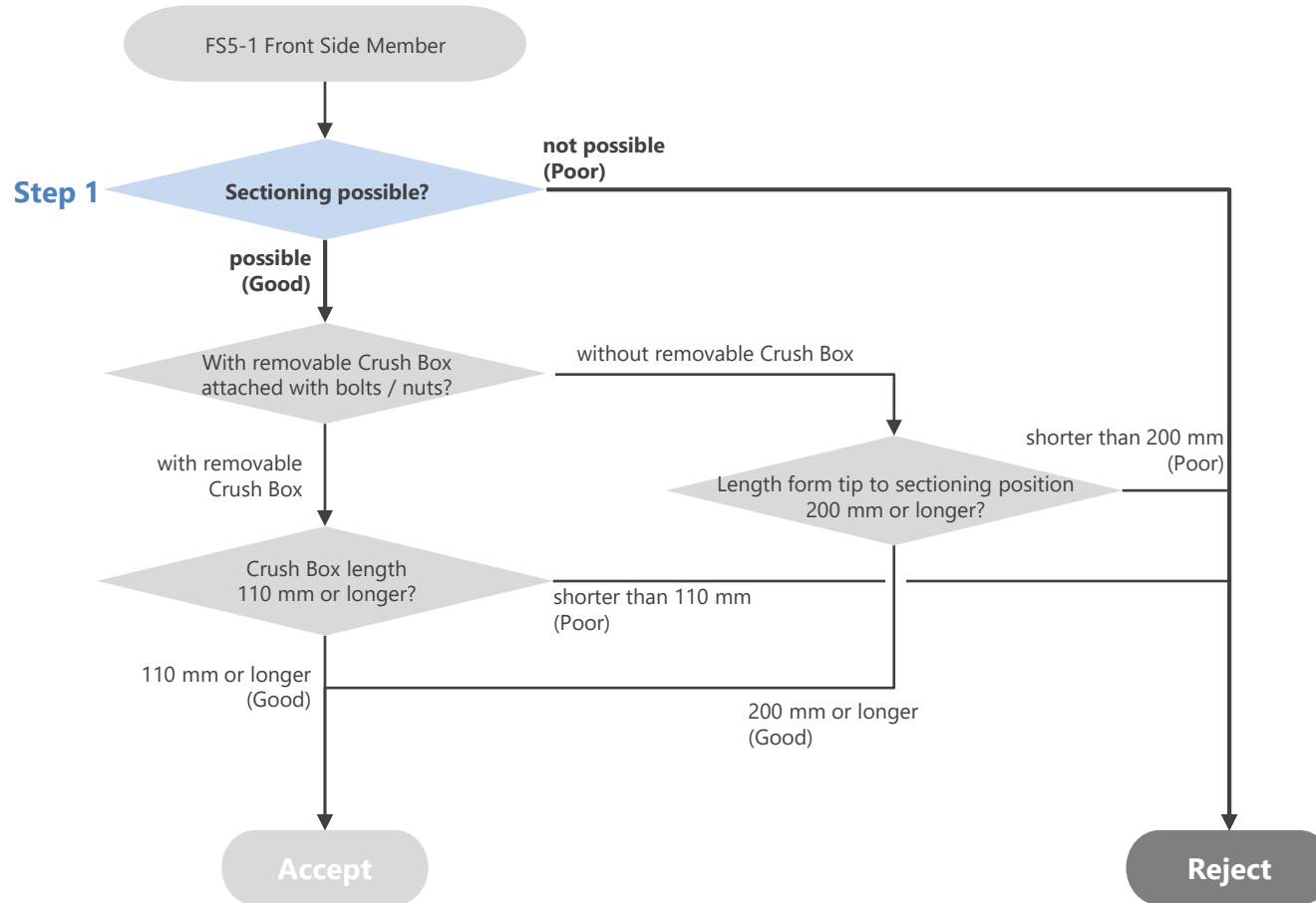
The length from the tip of FSM to the sectioning position was longer than 200 mm.

There was damage only in front of its sectioning position and no damage behind it.

# Check Flow



# Check Flow – Step 1



# Check – Step 1

Check if sectioning of the FSM is officially offered by OEMs in the repair manual.

## 【Determination】

### Good

☞ Sectioning is possible, it is determined as Good.



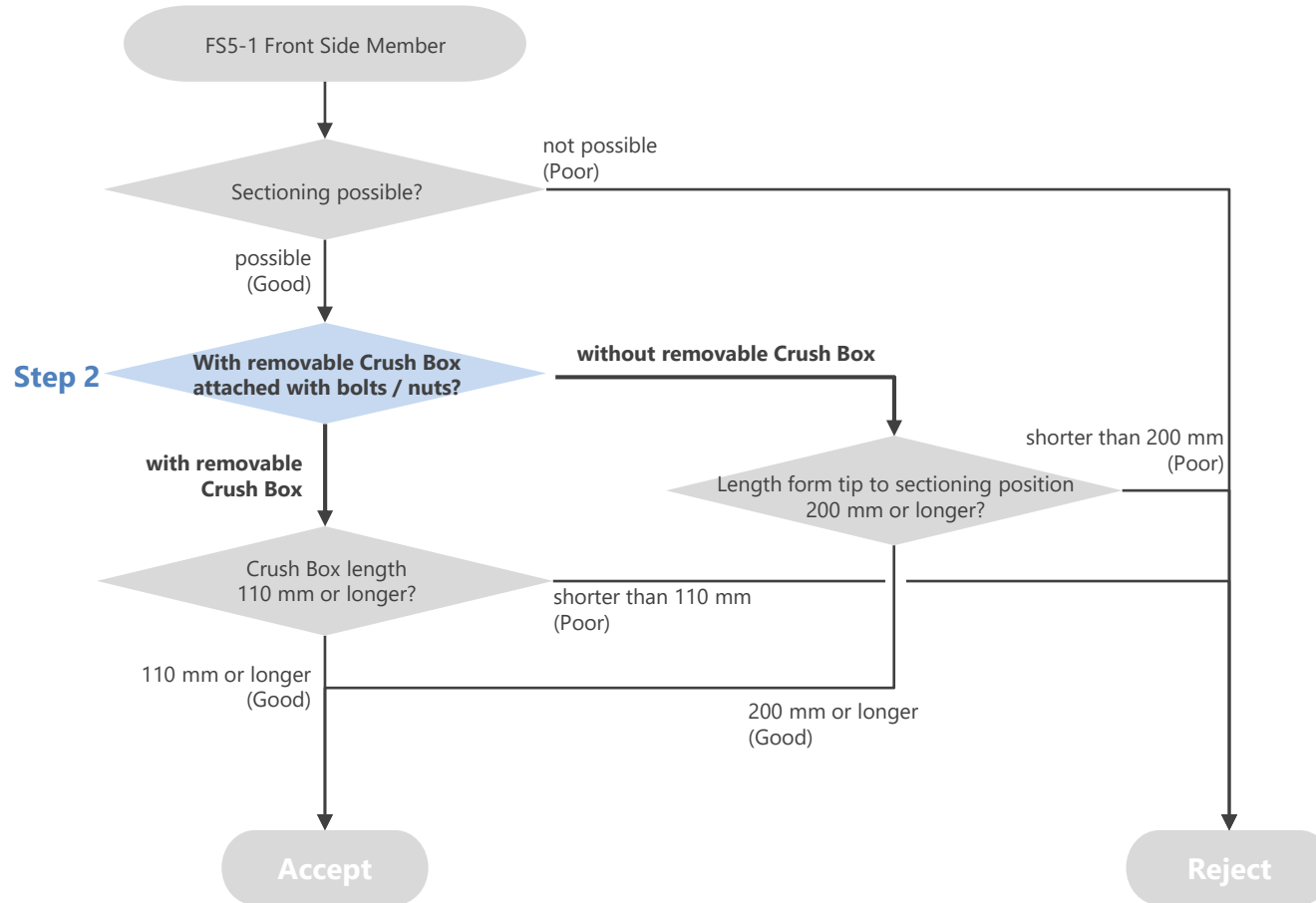
### Poor

☞ Sectioning is not possible, it is determined as Poor and

**Reject**



# Check Flow – Step 2





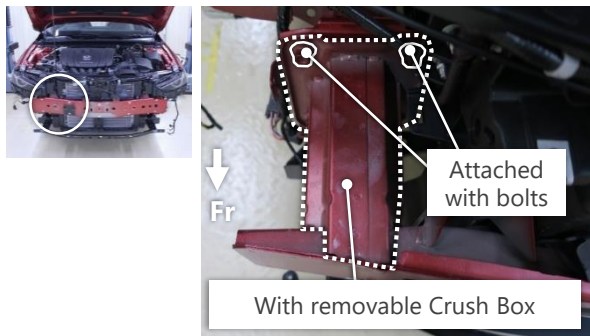
# Check – Step 2

Check if the Crush Box is attached with bolts or nuts and removable separately.

## 【Determination】

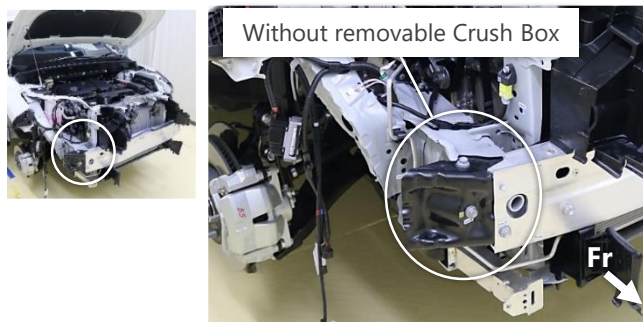
### With removable Crush Box

- ☞ When the separate Crush Box is attached to the front end of the FSM with bolts or nuts, it is considered with the removable Crush Box.

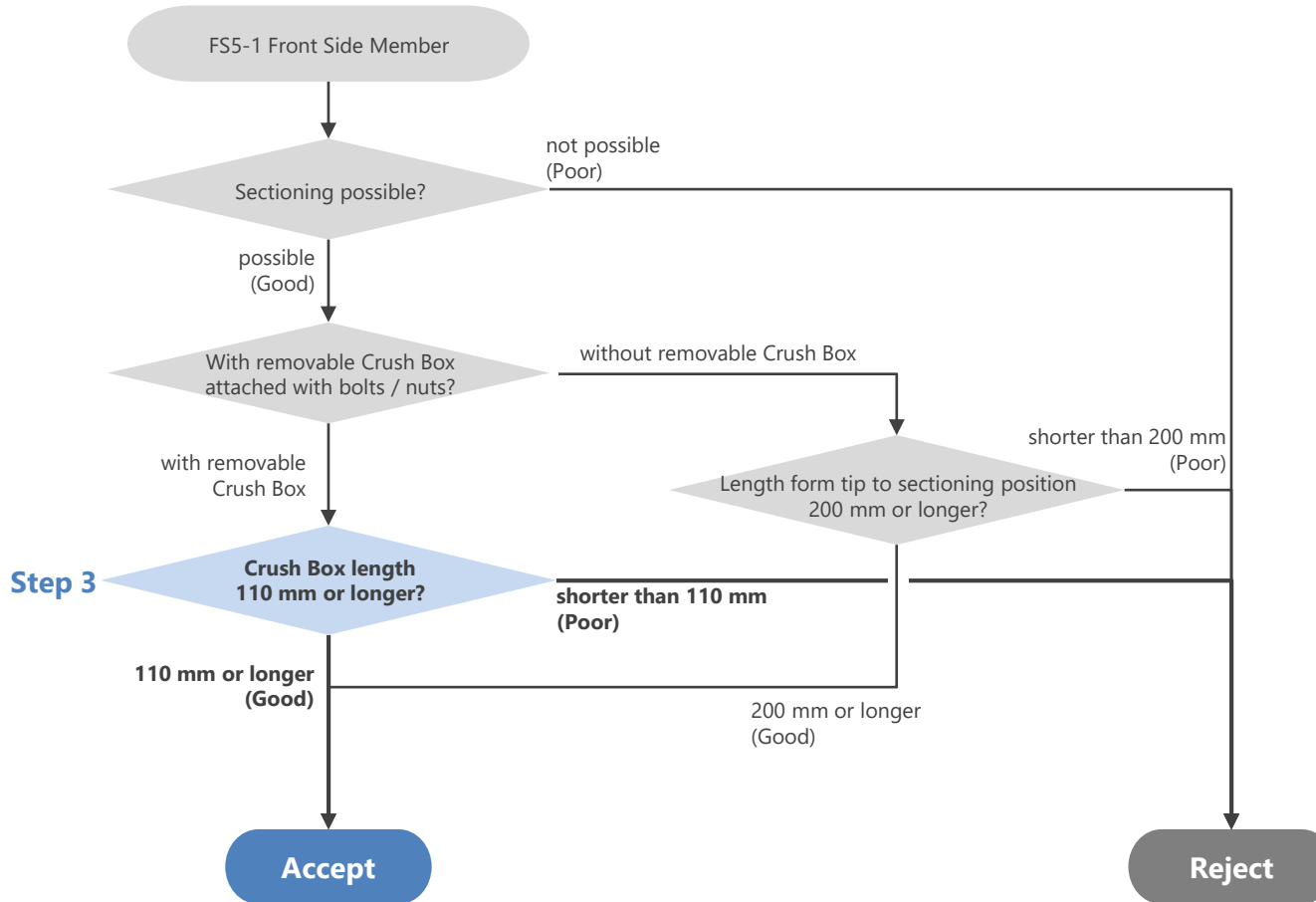


### Without removable Crush Box

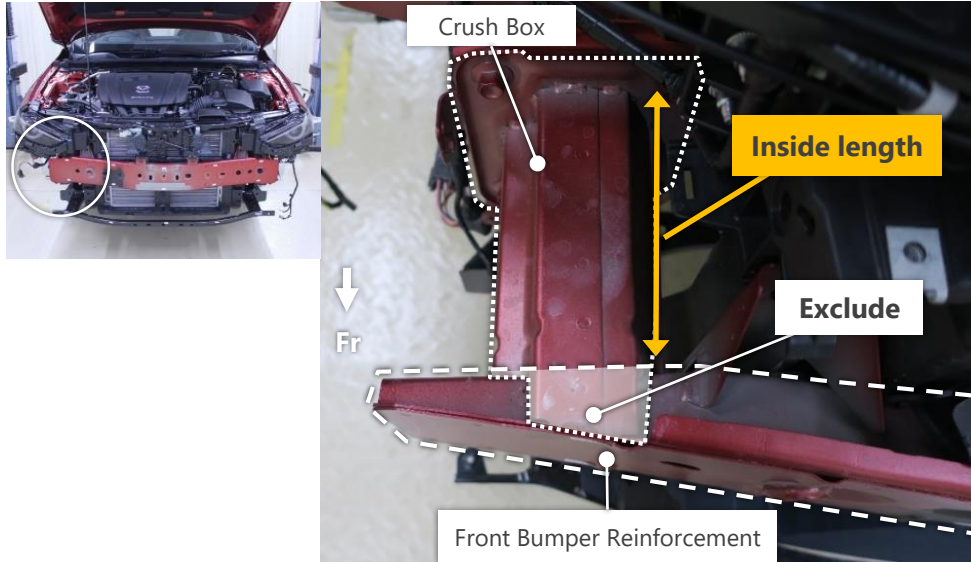
- ☞ When the Crush Box cannot be detached with bolts or nuts, it is considered without the removable Crush Box.



# Check Flow – Step 3



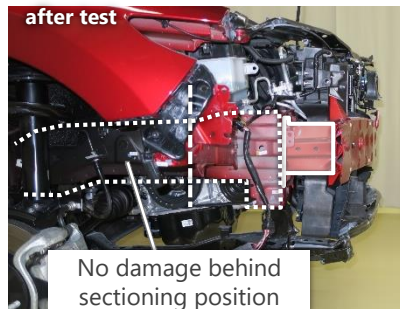
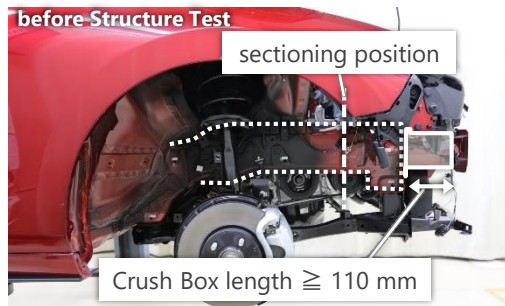
# Check – Step 3-1



Check the inside length of the Crush Box.

- ☞ The overlap part of the Crush Box and the Front Bumper Reinforcement is excluded from the length.

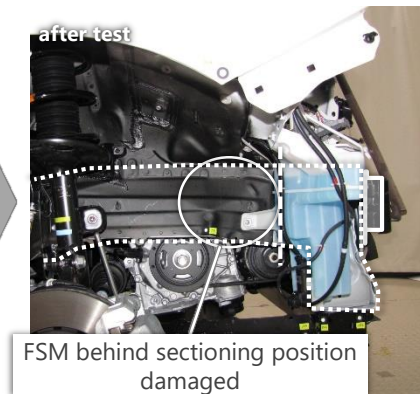
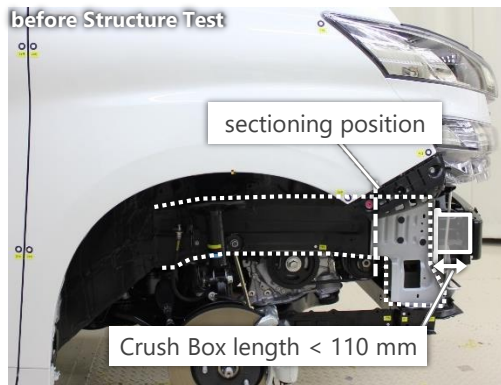
# Check – Step 3-2



## 【Determination】

### Good

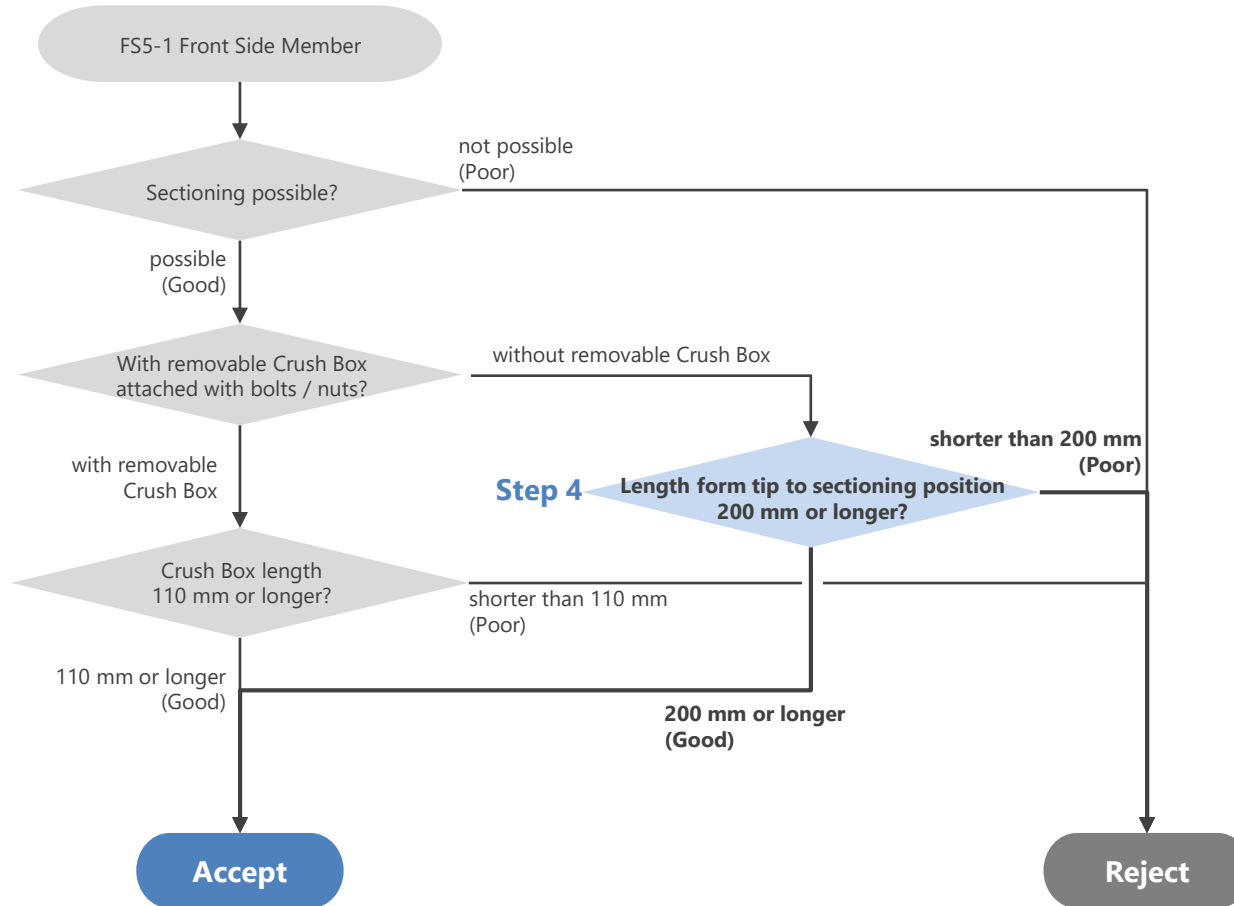
- When the length of the Crush Box is 110 mm or longer, it is structure where damage behind the sectioning position is less likely to occur, determined as Good and **Accept**



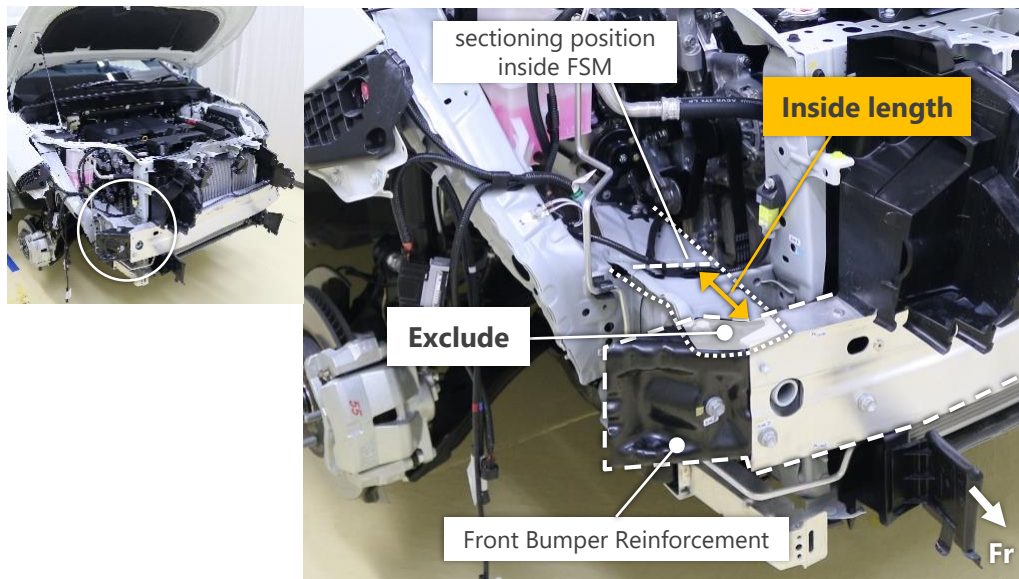
### Poor

- When the length of the Crush Box is shorter than 110 mm, it is determined as Poor and **Reject**

# Check Flow – Step 4



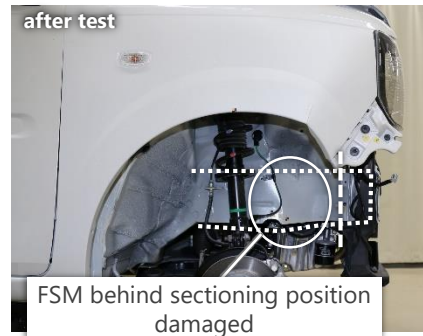
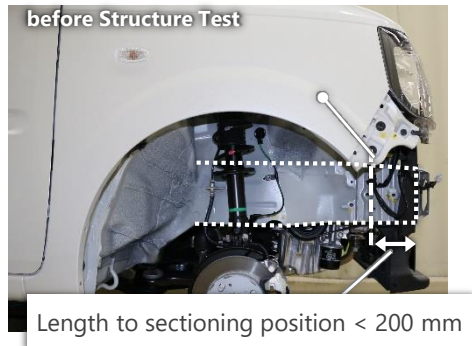
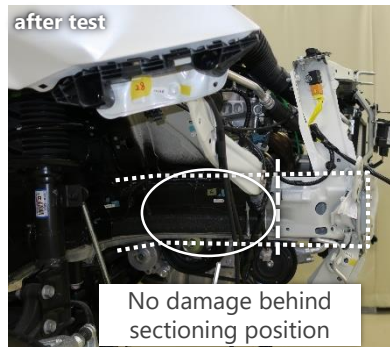
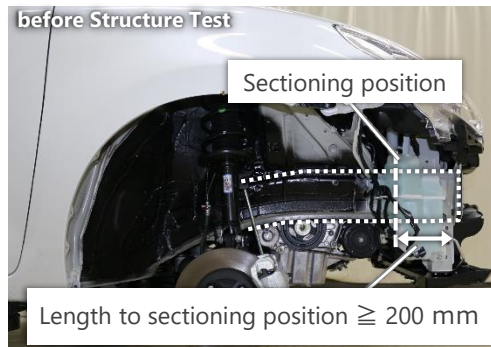
# Check – Step 4-1



Check the inside length from the tip of FSM to the sectioning position.

- ☞ Check the sectioning position inside the FSM.
- ☞ The overlap part with the Front Bumper Reinforcement is excluded from the length.

# Check – Step 4-2



## 【Determination】

### Good

- When the length from the tip of the FSM to the sectioning position is 200 mm or longer, it is determined as Good and **Accept**

### Poor

- When the length from the tip of the FSM to the sectioning position is shorter than 200 mm, it is determined as Poor and **Reject**