

DET Supplemental Document

FB7-1 Hood

Condition

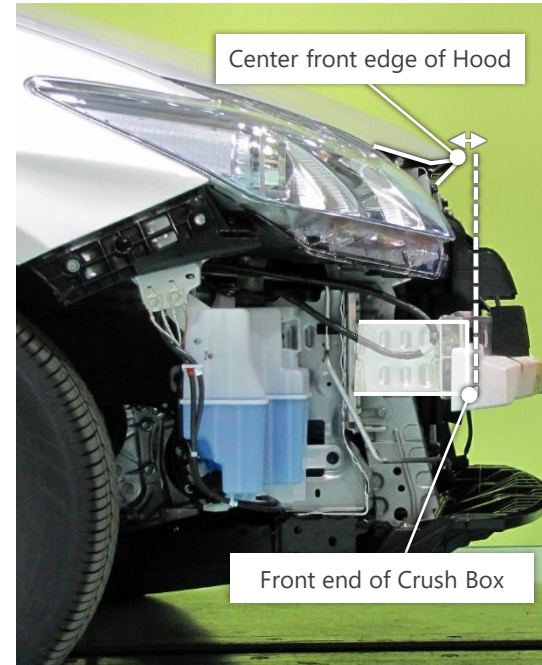
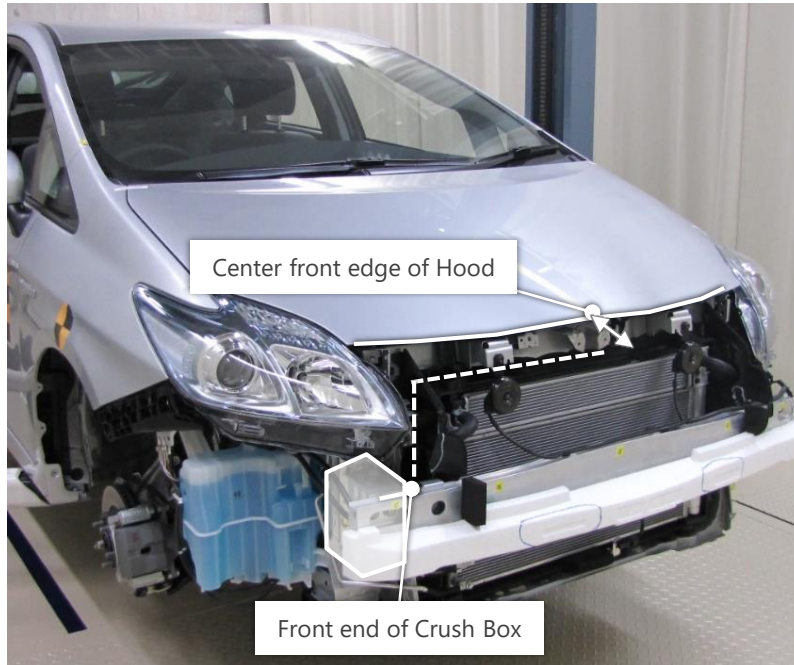
- Vehicle : All vehicles
- Part and Structure : Center front edge of Hood and front end of Front Crush Box



Criteria

The center front edge of the Hood should be at the same position as or behind the front end of the Front Crush Box*.

* When the Crush Box is not equipped, the front end of the Front Side Member

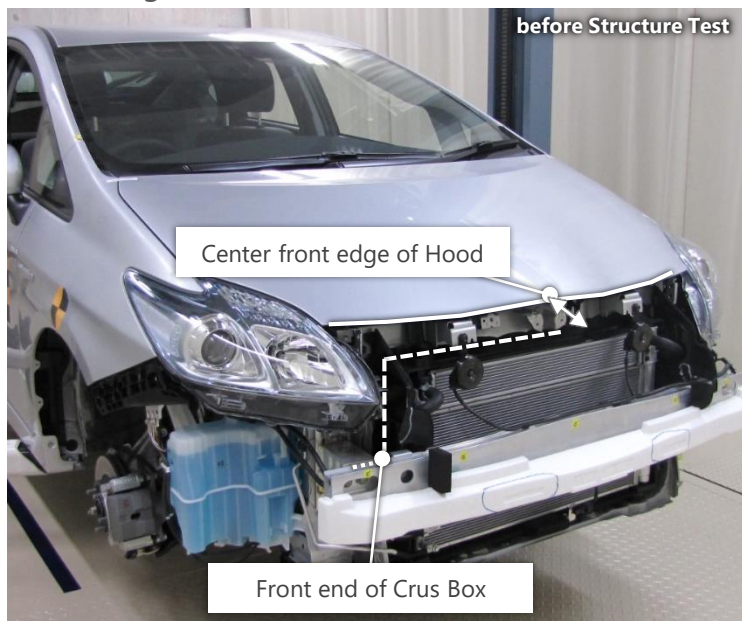


Reason

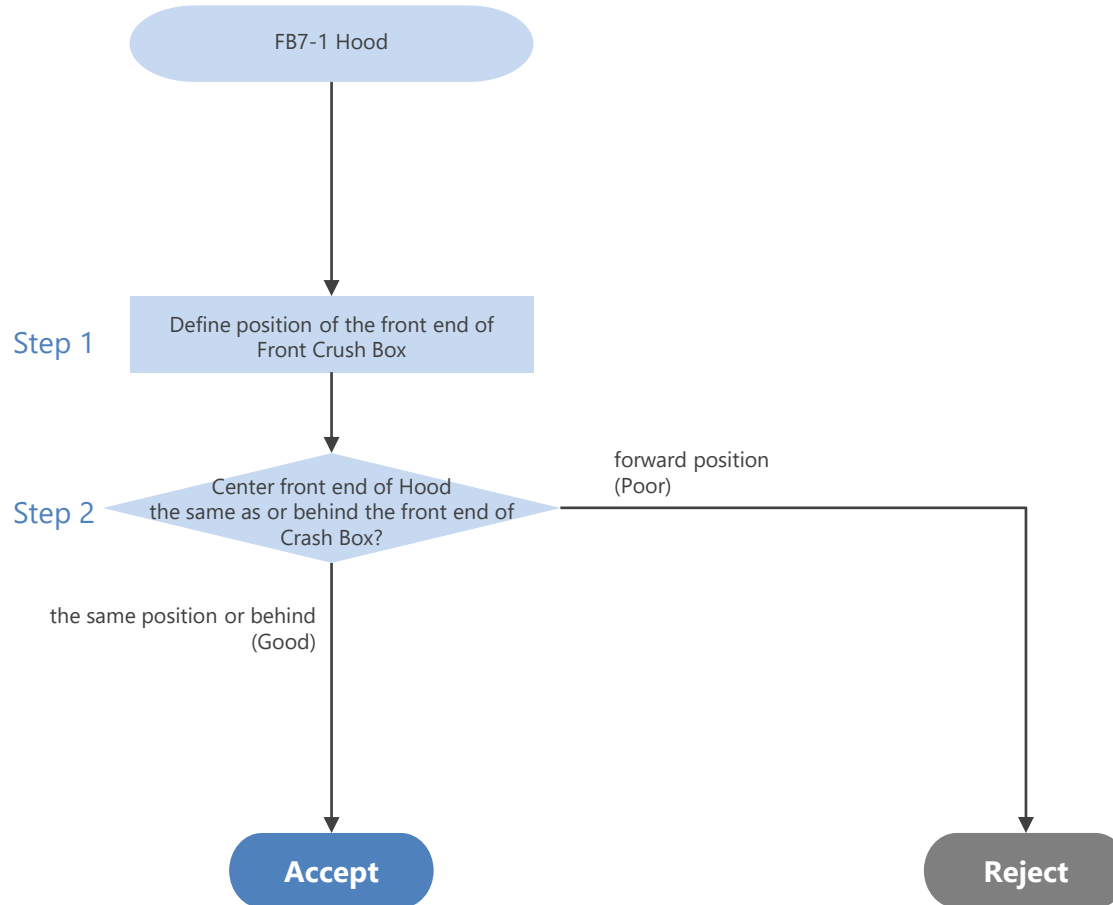
When the center front edge of the Hood is at the same position as or behind the front end of the Front Crush Box, the Hood is less likely to hit the barrier on the Structure Test, preventing damage to the Hood.

Example of layout where center front edge of Hood was behind front end of Crush Box

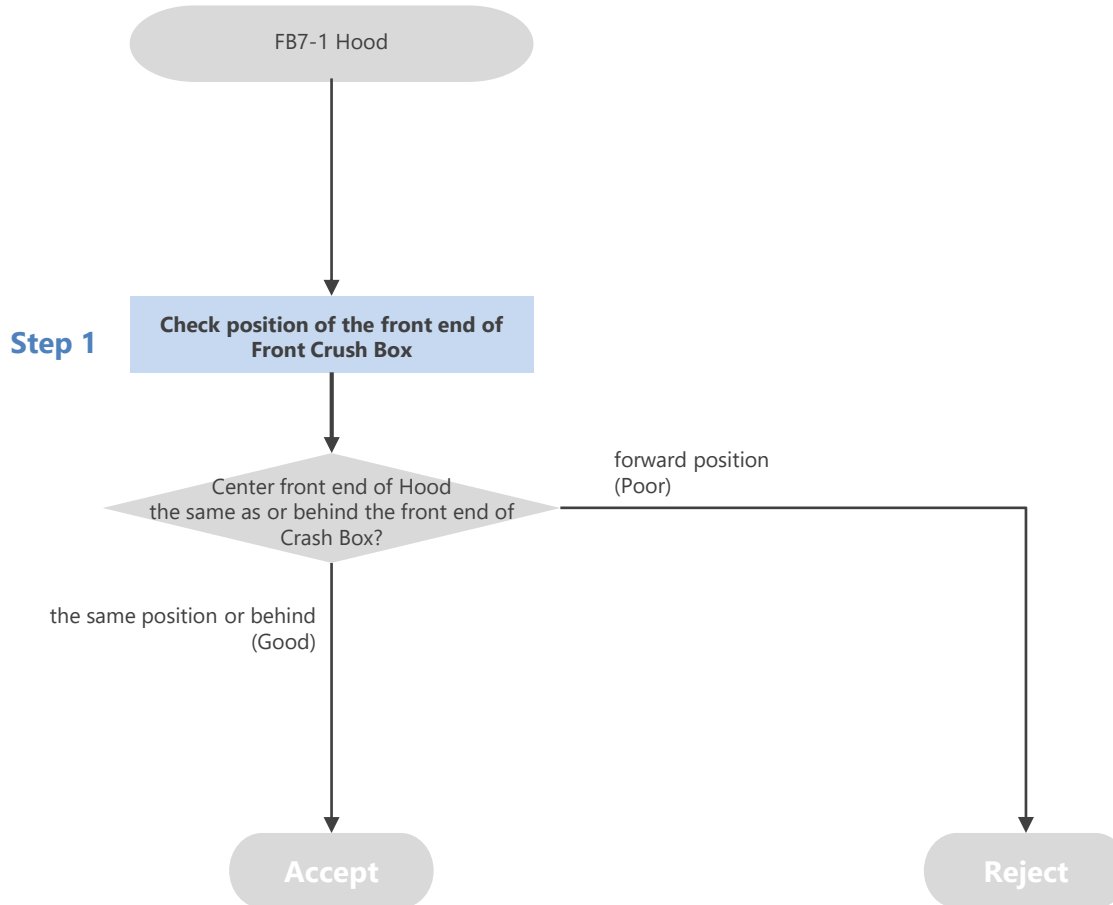
Damage to Hood did not occur on the Structure Test.



Check Flow



Check Flow – Step 1

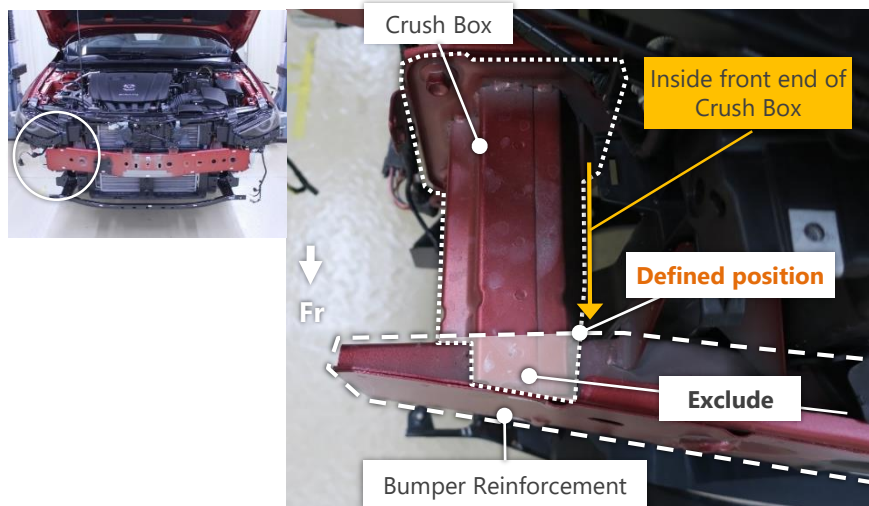


Check – Step 1

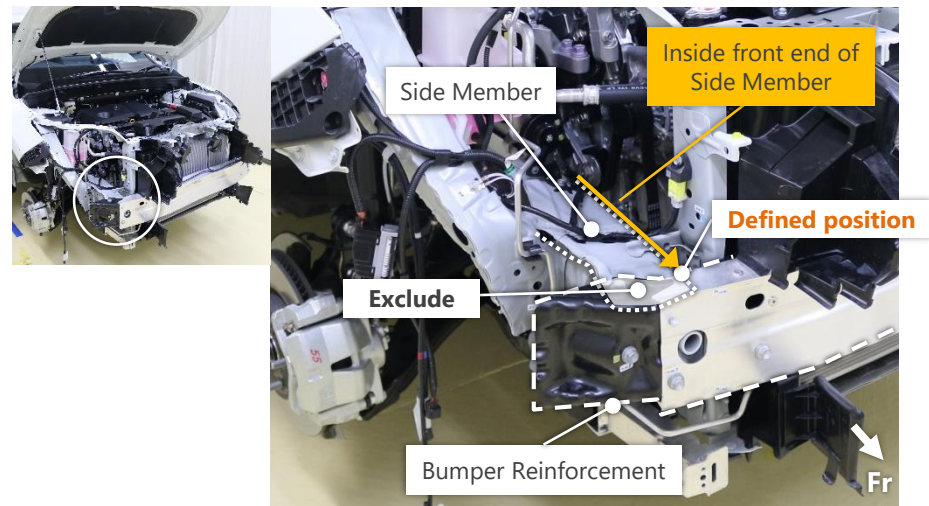
Define the position of the front end of the Front Crush Box.

【Determination】

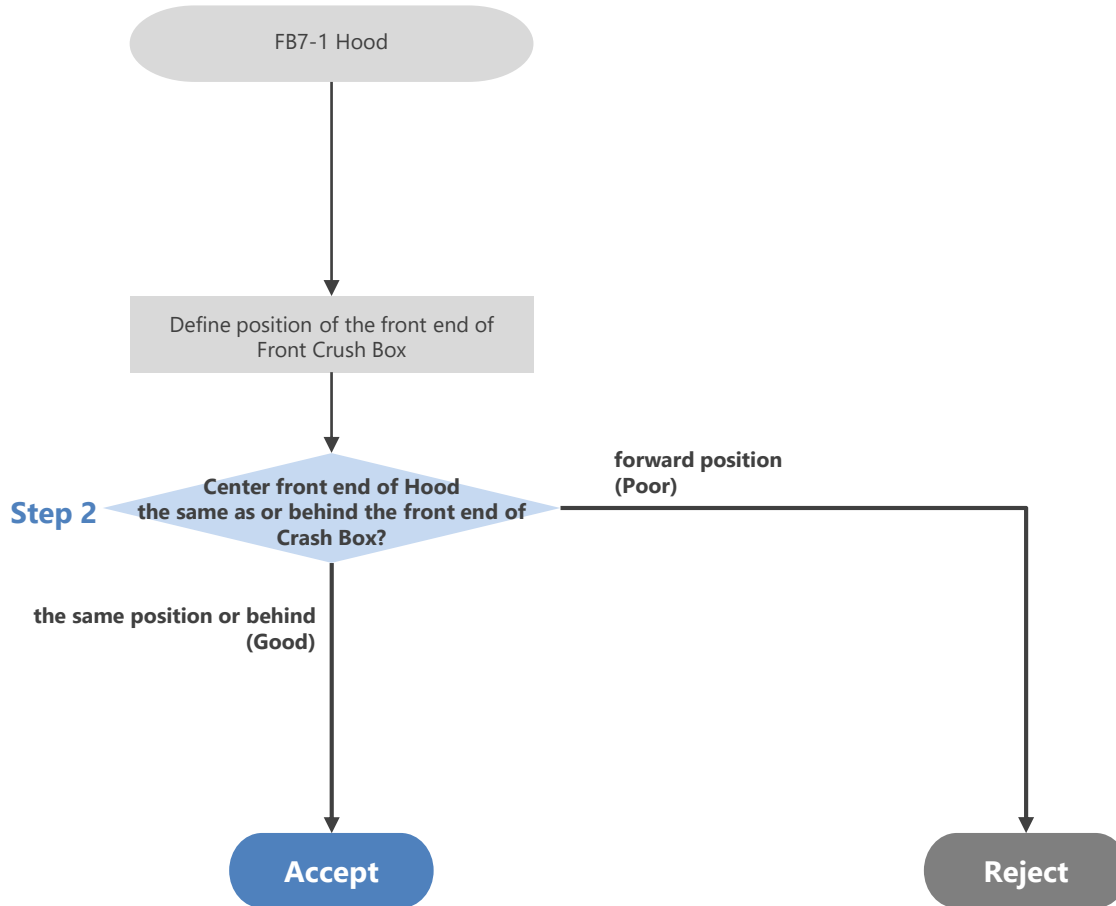
- ☞ Excluding the overlap part of the Crush Box and the Front Bumper Reinforcement, the inside front end of the Crush Box is the position.



- ☞ When the Front Crush Box is not installed, the inside front end of the Front Side Member is the position.

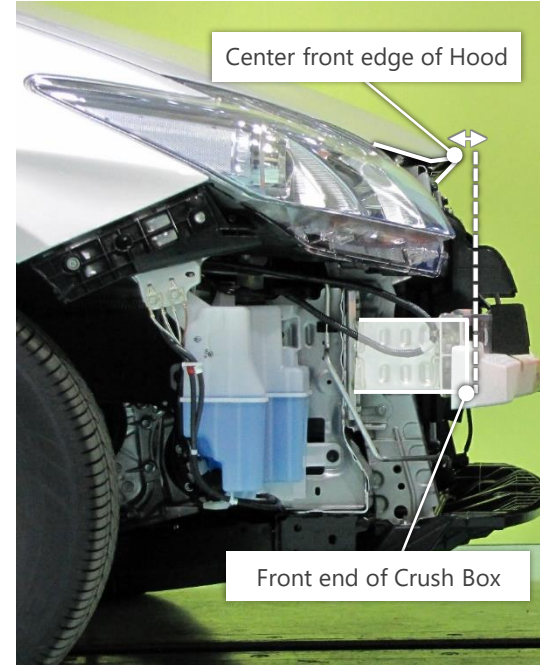
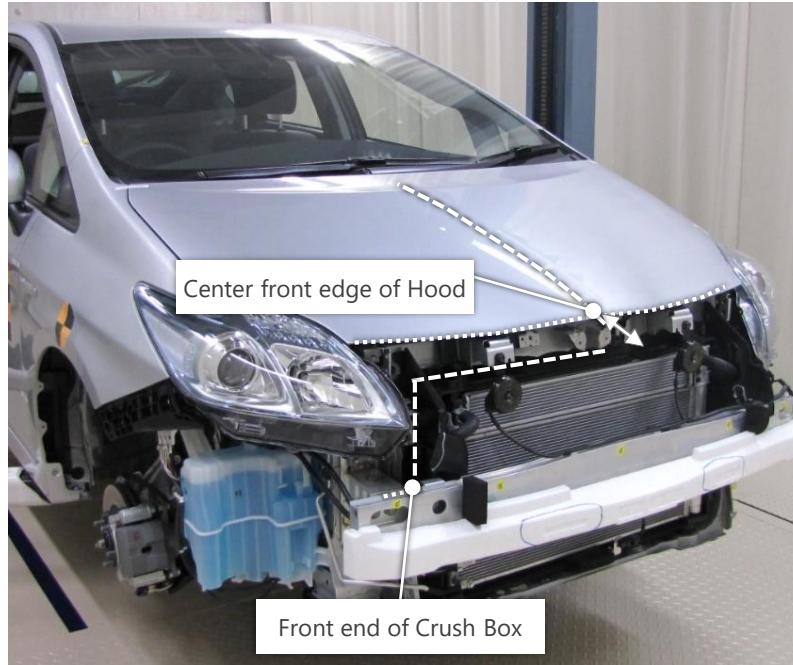


Check Flow – Step 2

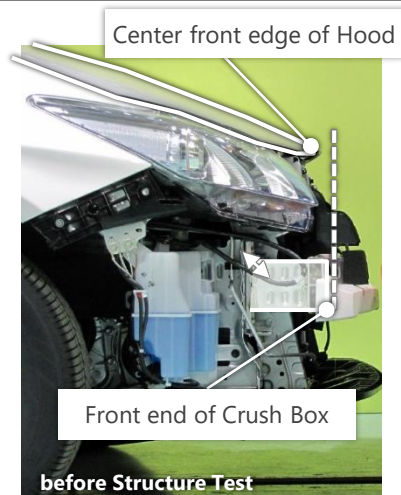


Check – Step 2-1

Compare the center front end of the Hood with the position of the front end of the Front Crash Box defined in Step 1, and check if that of the Hood is the same as or behind that of the Front Crash Box.



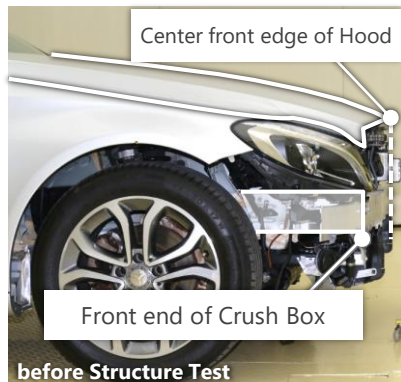
Check – Step 2-2



【Determination】

Good

- When the center front end of the Hood is the same as or behind the front end of the Crash Box, it is the structure where the Hood is less likely to be damaged in the Structure Test, determined as Good and **Accept**



Poor

- When the center front end of the Hood is in front of the front end of the Crash Box, it is determined as Poor and **Reject**