

Inspection Criteria

The radiator support should allow the condenser and radiator to slide rearward together when a force is applied.

Reason

When the radiator support allows the condenser and radiator to slide rearward together with the radiator support, damage to the condenser and radiator is less likely to occur.

Before Test

Front bumper reinforcement

Crushable part

Protected part of the cooling unit.

➔

After Test

Image of cooling unit moving rearward.

Example of a structure that allows the side, upper, and lower radiator supports to crush together with the bumper reinforcement while efficiently absorbing collision energy and move the cooler condenser and radiator rearward to minimize deformation.

Good Example

The radiator support absorbs energy while protecting the cooling unit.

Before Test

After Test

Neither condenser or radiator was damaged.

Poor Example

The condenser is installed on the side support and damage is likely to spread from the side support.

Before Test

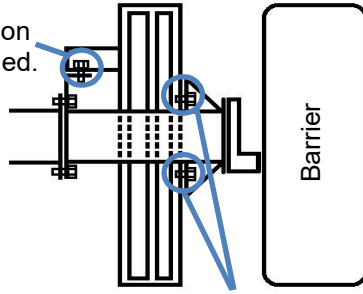
After Test

Condenser was bent and damaged.

RADIATOR SUPPORT(2/2)

Shroud panel before collision

Shroud panel installation
The front side is notched.

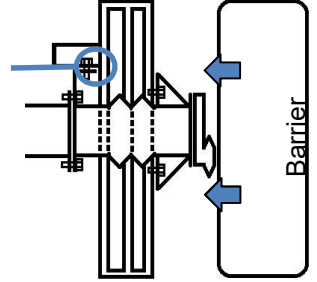


Shroud panel is engaged with crush box.

Example of a structure where the condenser and radiator slide rearward together with the shroud panel that moves rearward when the crush box crushes in a collision.

Shroud panel after collision

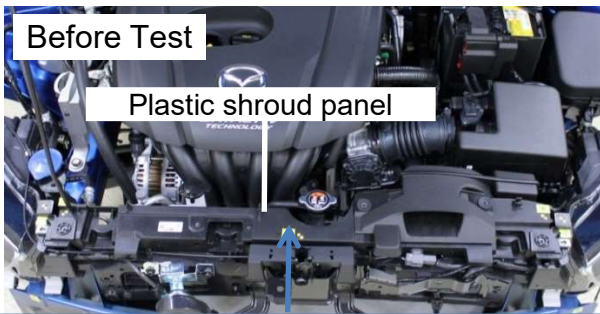
In a collision, the shroud panel, condenser, and radiator move rearward together.



Good Example

Before Test

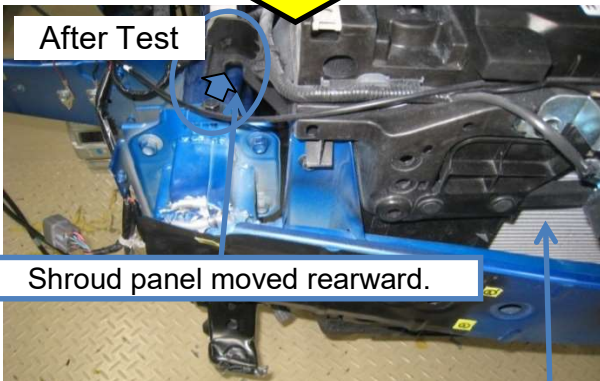
Plastic shroud panel



Shroud panel is detached from the mount on the body to protect the unit in a collision.

After Test

Shroud panel moved rearward.



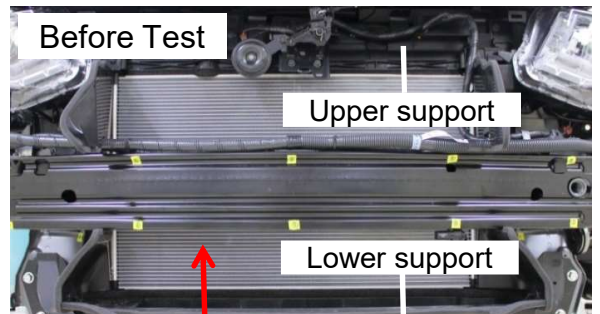
Neither condenser or radiator was damaged.

Poor Example

Before Test

Upper support

Lower support



Condensers are installed on the upper and lower supports and damage is likely to spread from the bumper reinforcement and crush box.

After Test

Condenser was damaged.

