

# Service Information

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Category <b>S</b>	<b>Technical</b>	Ref. No. E034/07B	Page 1 of <del>43</del> 49
Coverage <input type="checkbox"/> Distributor only <input checked="" type="checkbox"/> Please inform your dealers		Date Issued	July 30, 2007
Please convey this information to your <input type="checkbox"/> Director <input checked="" type="checkbox"/> General Manager <input checked="" type="checkbox"/> Warranty Dept. <input checked="" type="checkbox"/> Parts Dept. <input checked="" type="checkbox"/> Training Dept. <input checked="" type="checkbox"/> Field Rep.		Date Revised	July 28, 2010
Applicable Models  All model vehicles	Applicable Countries or Specifications  Europe		

**REVISED**

## Subject: Rust / Perforation Repair Procedure for Rear Fender Arch

### Revision Notes:

Table with corrosion Level Criteria on page 3 has been changed to fit with new policy.  
P/N information has been modified.

Guidelines for corrosion level assessment of corresponding components have been implemented as "APPENDIX – A" displayed on pages 43 - 49.

The updated sections are highlighted.

### Note: This Service information supersedes E003/06

This service information provides you with the repair criteria and the repair procedure against the rust / perforation on the rear fender arch, in order to promote the proper repair.

When you encounter a customer complaint on this concern, first check the level of rust / perforation, and then repair the rear fender arch according to the criteria and procedure mentioned in the following pages

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## How to evaluate the Corrosion Level on a vehicle brought into your workshop?

The following tables will show you sample pictures of different Corrosion Levels that can appear at the rear fender panel. Use these tables as a guideline and to judge the present Corrosion Level on vehicles brought into your dealership.

- If you will get into trouble with the judgment of corrosion Level with regards to make a clear statement if the corrosion visible on a car is Corrosion Level 1 or Corrosion Level 2, please contact your local Prior Approval Operator.
- To simplify the process of the judgment for your Prior Approval Operator, please provide meaningful pictures, which are representing the current situation on the component you need to judge.
- Deliver all known facts about warranty status and the history of previous measures that has been done to the vehicle and especially to the component you need to judge.

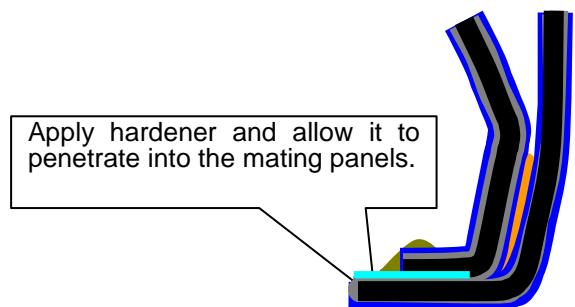
### Rear Fender Arch Corrosion Repair

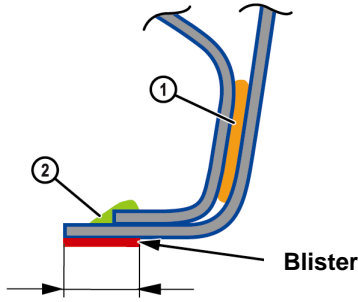
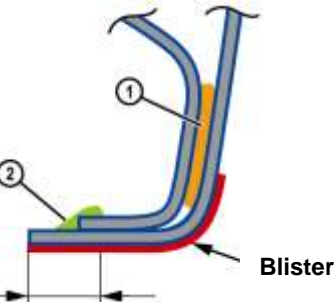
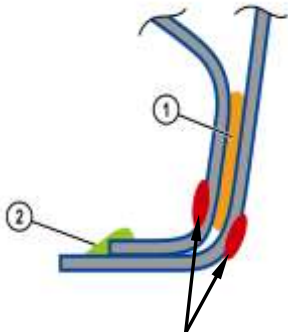
#### ***Why This Repair is Effective:***

The hardener has nature that absorbs the water then hardens, which shut off water supply and stop rust from spreading even if water has already entered.

#### ***Vital Points of Repair:***

Apply the hardener from the top of the fender arch toward the lower part so that the hardener penetrates into all over the mating panels of arch flange.



Corrosion Level	Evaluation Criteria for Rear Fender Arch Flange	Action Required	
Level - 0	<p>No damage on the paint sealer.(*)</p> <p>AND</p> <p>No visible blisters/peeling/corrosion on the rear fender arch.</p>	-	
Level - 1	<ul style="list-style-type: none"> <li>No damage on the Paint Sealer.(*)</li> </ul> <p>AND</p> <ul style="list-style-type: none"> <li>Visible blisters less than or equal to 10mm from the inner edge of the fender arch. (Even if corrosion appears in blisters.)</li> </ul>	<p>1 Adhesive Sealer 2 Paint Sealer</p>  <p>Blister</p> <p>Less than or equal to 10mm</p>	Repair
Level-2	<ul style="list-style-type: none"> <li>Paint Sealer damages.(*)</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>Visible blisters and corrosion in an area more than 10mm from the inner edge of the fender arch.</li> </ul>	<p>1 Adhesive Sealer 2 Paint Sealer</p>  <p>Blister</p> <p>More than 10mm</p>	Repair
Level-3	<p>Perforation in outer panel.</p> <p>OR</p> <p>Perforation in inner panel.</p>	<p>1 Adhesive Sealer 2 Paint Sealer</p>  <p>Perforation</p>	Replace

(\*): Mazda3, Mazda6, RX-8 only: Due to No sealer application(2), 323, MPV and Premacy are not affected this criteria

**NOTE: Find the detailed guidelines for corrosion level assessment explained in “Appendix A” at the end of this Service Information on pages 43 - 49.**

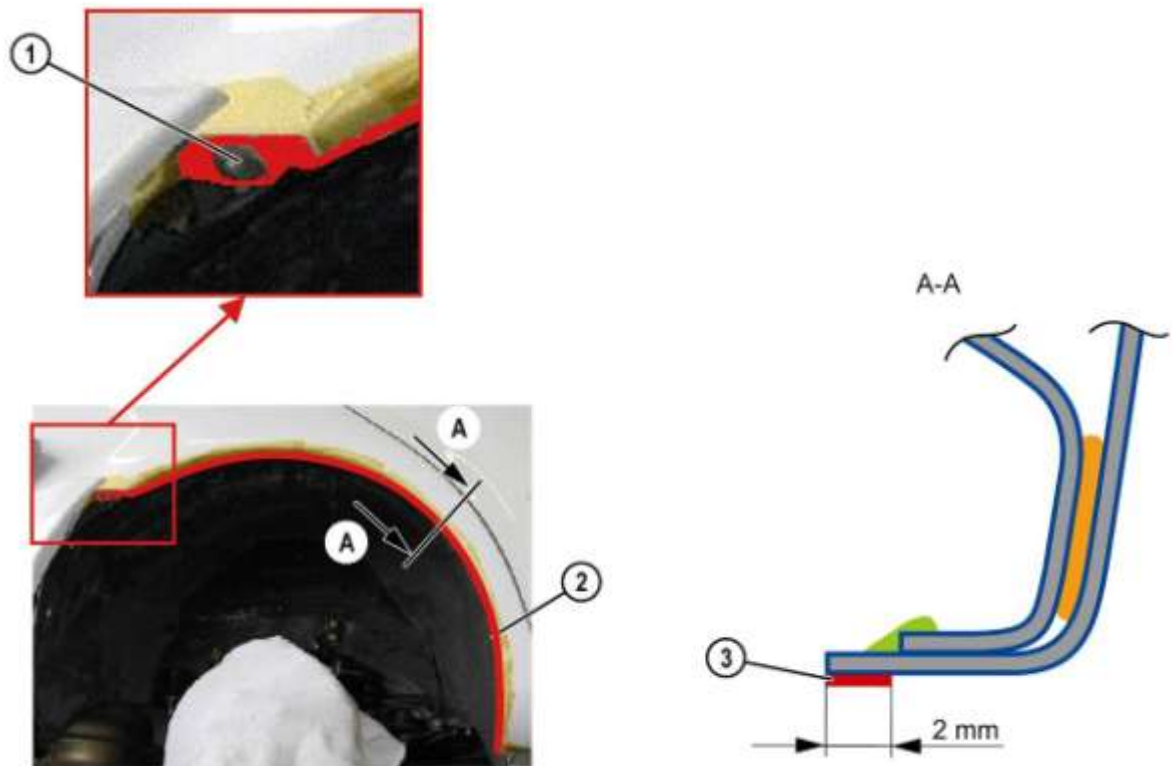
## Material to be used

No.	Material Short Text	Supplier	Brand	Brand Name	Mazda Part No.	Remark
I	Corrosion Protection Primer	DuPont	Standox	Etching Adhesion Primer		
			DuPont Refinish	Etching Primer 635R		
			Spies-Hecker	Priomat Wash Primer 4075		
		PPG	NEXA Autocolor	P565-9850		
			PPG	D831		
		AKZO NOBEL	Sikkens	Washprimer EM CF		
			Lesonal	2K Etch Primer		
BASF	R-M	Eurofill				
	Glasurit	283-150 VOC				
II	Weld Primer	Foerch		L233		-
				L208		-
III	Primer Surfacer	To avoid any incompatibility, please apply a Primer Surfacer that is recommended to use with the paint material and already applied Corrosion Protection Primer used in your workshop (for details contact your local paint manufacture).				
IV	Paint Sealer	Henkel	Teroson	Terostat 9120		
		WUERTH	saBesto	BOND+SEAL ALL-IN-ONE		
				Clinched Flange Sealer	DD10-FS-001	-
V	Anti-Corrosion Wax			Anti Corrosion Cavity Wax 0,5l Aerosol	DN05-BL-MLS-9A	-
				Anti Corrosion Cavity Wax 1l Can	DN10-BL-MLB-9A	-
VI	Stone Chip Protection Material			Stone Chipping Coating (grey) 1l Can	DN10-GR-442-9A	-
				Stone Chipping Coating (black) 1l Can	DN 10-BL-442-9A	-
				Stone Chipping Coating (grey) 1l Can	DN10-GR-440-9A	-
VII	Chipping primer			Stone Chipping Coating (black) 1l Can	DN 10-BL-445-9A	1 unit per 20-30 vehicles
VIII	Cleaning Agent	To avoid any incompatibility, please use a cleaning agent that is recommended by the supplier of your paint materials used in your workshop. (for details contact your local supplier manufacture).				
IX	Tin-Solder Bar	To avoid any incompatibility, please use Tin-Solder Bars that are recommended by the supplier of your paint materials used in your workshop. (for details contact your local supplier manufacture).				
X	Spatula Kit	<del>Contains different type of spatulas to smoothen the silicone sealant.</del> Spatula Kit's are not available any longer. Please make use of those Spatula locally available and applicable to be used for this operation.			4006-W3-101*	One spatula for many vehicles
XI	Hardener			Hardener 1L Can	R001-SL-271	-
XII	Fender Sealant (Silicone sealant) (black)	Black		310ml Cartridge	11RT-V7-091	1 cartrige per 3 vehicles
		Half Transparent		100ml Cartridge	K100-W0-590A HC	
XIV	Vinyl Tape (black)	Thickness 0.15mm Length 33m			R001-TE-100	one color: 1 unit per 10 vehicles
	Vinyl Tape (yellow)	Thickness 0.15mm Length 33m			R002-TE-100	Other color: 1 unit per 20 vehicles

## Level 1 Repair procedure for rear wheel fender arch flange

### Outline of Repair Procedure

- Application of Chipping Primer (VII)
  - Apply chipping primer (VII) all along the fender. (Application width: 2 mm)
  - Apply chipping primer (VII) to the joint area of rear fender and bumper.

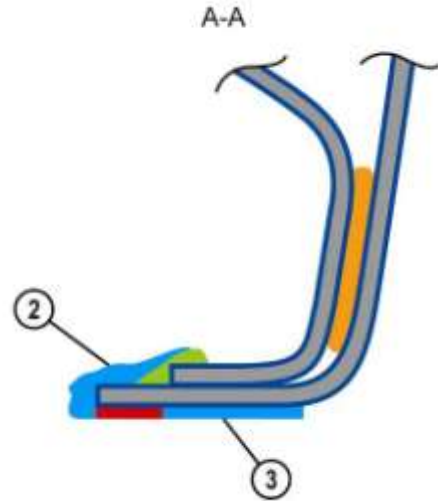
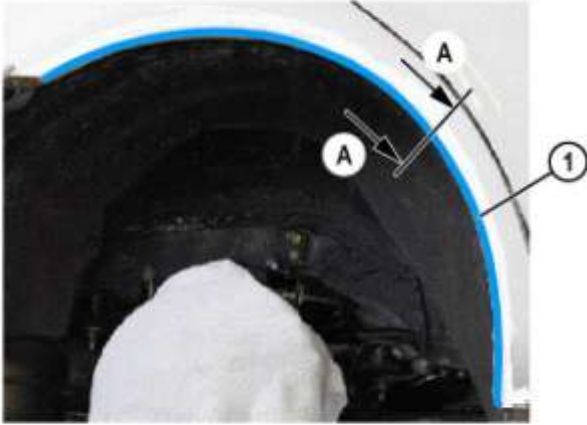


MSP1\_001

- 1 Grommet
- 3 Application area

- 2 Chipping primer (VII)

- Application of Silicone Sealant to All Along the Rear Fender Arch
  - Apply silicone sealant to the inner area of flange edges.
  - Apply silicone sealant to horizontal flange surface of rear wheel fender.



MSP1\_002

- 1 Application area
- 2 Inner area of flange edge

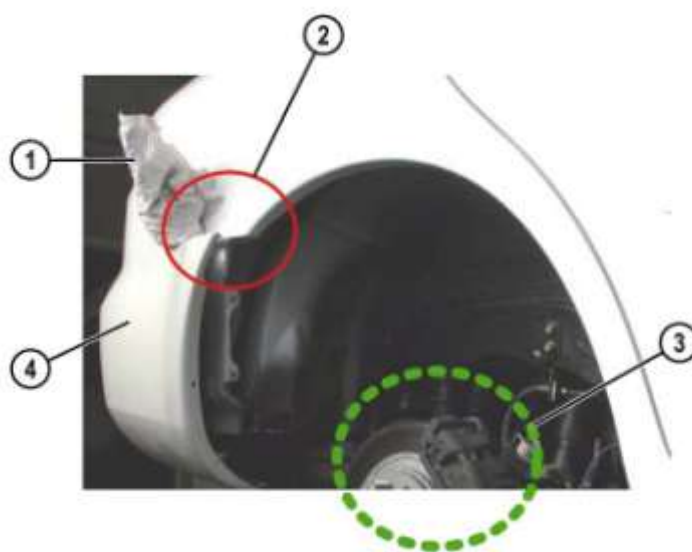
- 3 Flange surface

## Repair Procedure

1. Jack up the vehicle and remove the tires and the mud guards.
2. Remove the screws from the front-side rear bumper installation location.
3. Pull the rear bumper toward you, and insert a piece of cloth between the rear bumper and the rear fender.

**NOTE:** To avoid any contamination of the brake system with chipping primer (VII) or silicone sealant , cover the area 3 shown in the picture below with a suitable protection sheet or foil.

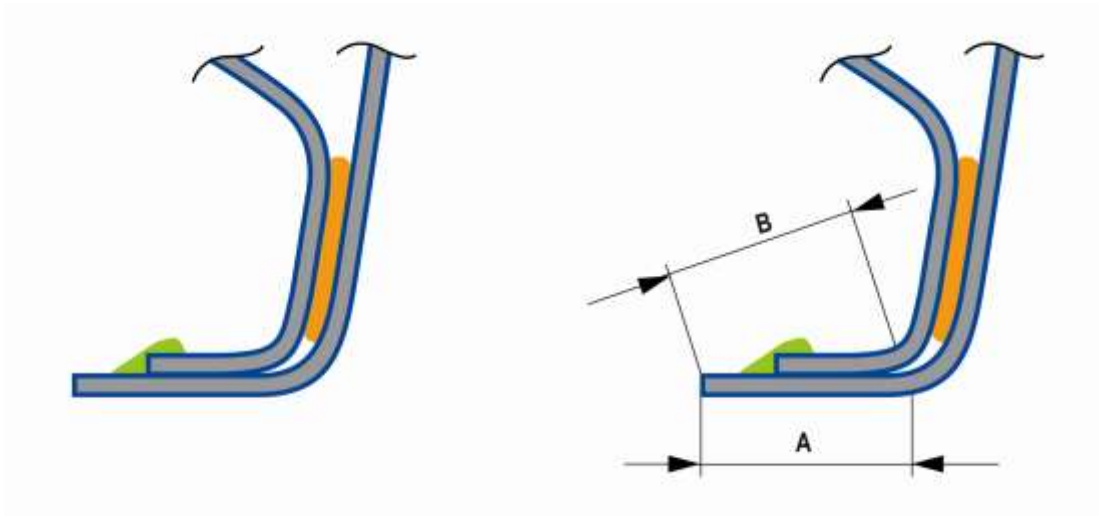
**NOTE:** It is not necessary to fully remove the Mud Guard to proceed the prevention work. If the Mud Guard has already been removed for any other reason be careful not to damage the applied silicone sealant during reassembly



MSP1\_003

- |   |                   |   |             |
|---|-------------------|---|-------------|
| 1 | Cloth             | 3 | Cover       |
| 2 | Remove the screws | 4 | Rear bumper |

4. Clean and degrease the fender arch flange at locations “A” and “B” by using a waste cloth.



MSP1\_004

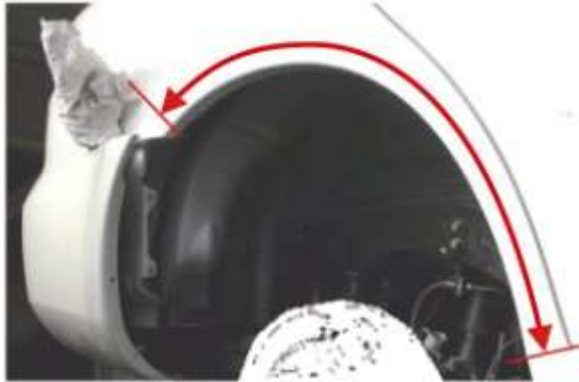
**NOTE:** Use suitable brush to clean the area B carefully from dust and sand. Take care not to damage the original paint sealer.

**NOTE:** In order to ensure a good adhesion of the silicone sealant, clean and degrease the surface A and B where the silicone sealant will be applied.



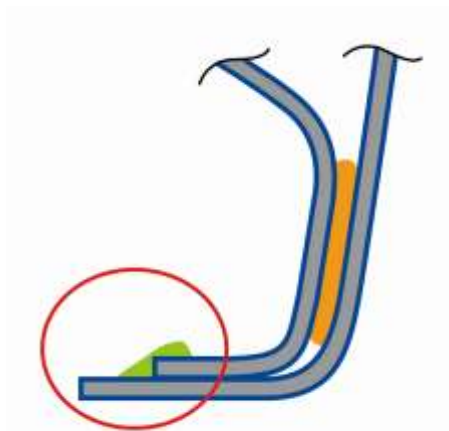
5. Make sure there is no break or damage on the sealer. If you will find any damage on the paint sealer, corrosion possibly has already appeared inside of the panel joint and corrosion prevention cannot be effective. In such cases remove the paint sealer and perform repair regarding to the level 2 repair procedure. .

**NOTE:** Some models(323, MPV and Premacy,etc) does not have paint sealer, therefore it is not necessary to perform this step.



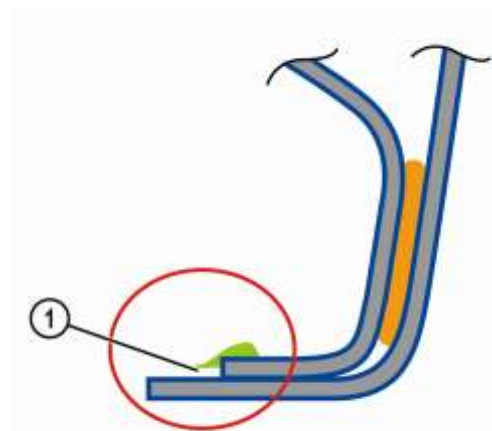
MSP1\_005

- 1 Mirror



**Correct**

MSP1\_006



**Incorrect**

MSP1\_007

- 1 Break in paint sealer

6. As a preparation for the application of chipping primer (VII), lightly sandpaper the coating surface so that the coating can affix well.

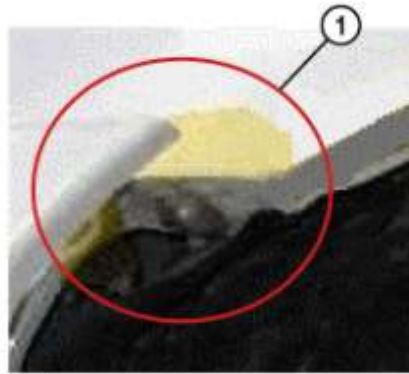
**NOTE:** Using a 180 – 240 sandpaper, lightly stroke the paint surface a couple of times.

7. Apply masking tape as specified in the following procedure.

Areas To Be Covered By Masking Tape For Chipping Primer (VII) Application

- Black silicone sealant (XII) need to be used, install the masking tape to the joint of the fender and bumper only.

**NOTE:** The installed chipping primer (VII) will be covered completely by the later applied black silicone sealant (XII). Therefore it is not necessary to apply masking tape to the flange surface.



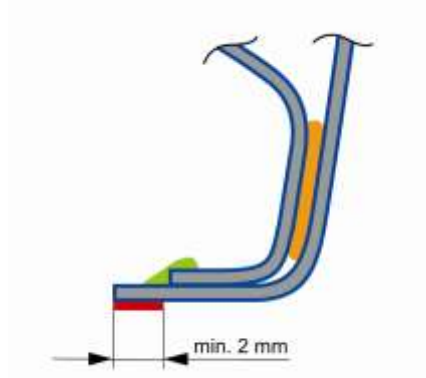
MSP1\_008

1 Masking tape

8. Apply the chipping primer (VII) according to the following application procedure.

### Chipping Primer(VII) Application Procedure

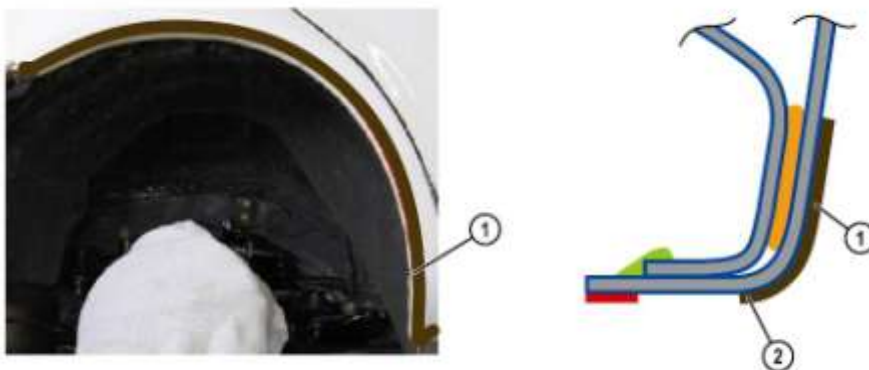
- Black silicone sealant (XII) is used, apply 3 layers of chipping primer (VII) with a brush until the thickness of the chipping primer (VII) becomes approx. 0.5 mm. Make sure that the body colour cannot be seen anymore in this area.



**NOTE:** Allow the chipping primer (VII) to dry for a few minutes before you will apply the next layer. When application is finished, allow the chipping primer (VII) to dry for approx. 30 minutes. (Lightly touch the surface to check if it is dry.)

**PURPOSE:** The purpose of the applied chipping primer (VII) and the afterwards installed vinyl tape is to act as a guide way to ensure a specified material thickness of approx. 0,5mm. Furthermore they will be used to guide the spatula during spreading the silicone sealant to the area between chipping primer (VII) and vinyl tape. So the finish of the silicone sealant surface is highly depending on the quality of the chipping primer (VII) and vinyl tape application.

- Apply vinyl tape as shown in the following illustration. Apply approx. 3 plies of the vinyl tape until the thickness is approx. 0.5 mm.



1 Vinyl tape

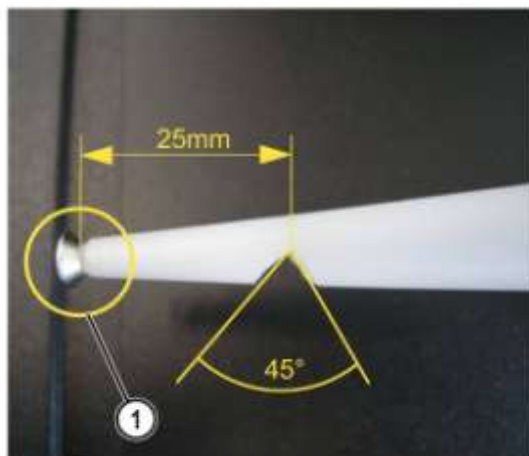
2 Corner start

MSP1\_016

**NOTE:** Using different colors of vinyl tape for each ply will simplify the application because you can align the edge of the tape exactly along the edge of the previously applied layer of tape.

**NOTE:** Avoid breaks in the tape during application. Otherwise the edges caused by the brakes in the tape will be transferred to the surface of the silicone material

10. Prepare nozzle No. 1 for the application of the silicone sealant to the inner edge of the rear fender arch flange as shown on the following picture.



MSP1\_080

- 1 Close the whole by using a screw

**WARNING:** For the necessary protection measures please refer to the corresponding safety data sheet available at <http://asp.be.sgs.com/msds> or contact your National Sales Company or Independent Distributor.

**CAUTION:** Do not perform silicone sealant application in a paint workshop in order to ensure the quality of paint finish.

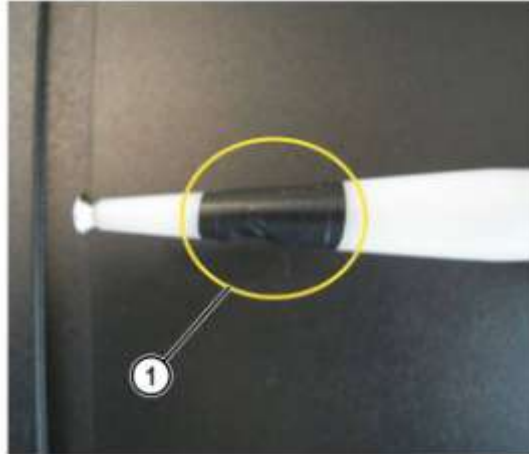
11. Position the nozzle to the inner edge of the flange and apply the silicone sealant all along the rear fender arch flange.



MSP1\_081

**NOTE:** Do not guide the nozzle by pressing the V-shape onto the edge because the chipping primer will get damaged. Guide the nozzle gently along the edge of the flange by ensuring the edge runs in between the V-shape.

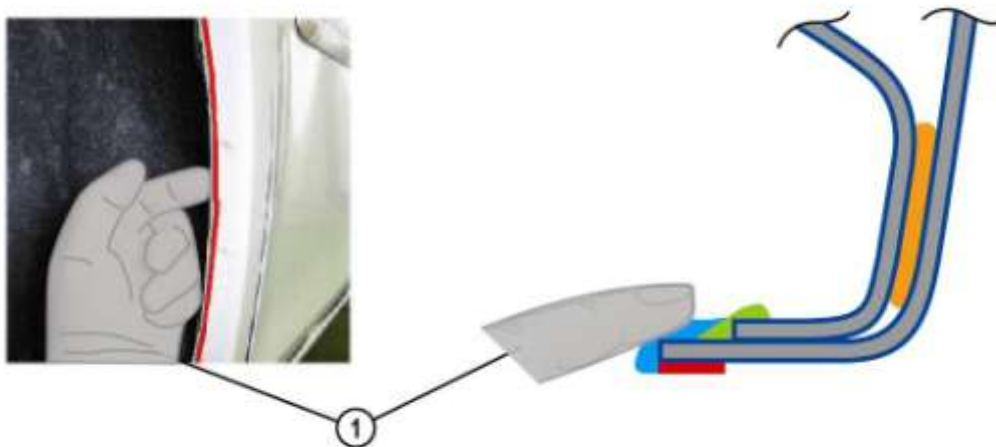
12. Close the V-shape of nozzle No. 1 by wrapping around vinyl tape. This will prevent the silicone sealer from drying.



MSP1\_083

- 1 Vinyl Tape

13. Arrange the applied silicone sealant onto the back of the flange by using your finger. Please ensure to wear protection gloves when spreading the material in this way.

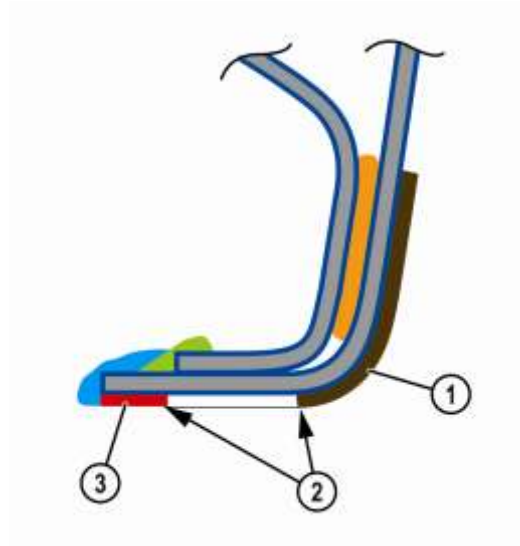


MSP1\_015

- 1 Protection Glove

**NOTE:** Spread the material in a gentle way, otherwise you will wipe off the material from inner edge of the flange. Check the result by using a mirror.

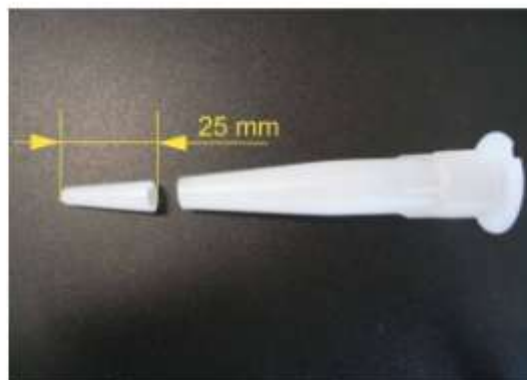
**NOTE:** Please keep in mind that the delivered 310ml cartridges will last for about 3 vehicles (2 rear fenders per vehicle). So re-install nozzle No.1 onto the cartridges after complete application is finished and close the V-shape of the nozzle by wrapping around some vinyl tape. This will avoid the remaining sealer from drying. You can leave nozzle No.2 unprotected because the dried sealer can be removed easily.



MSP1\_017

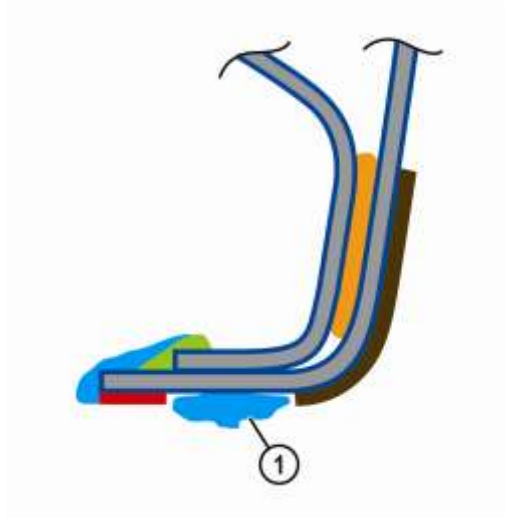
- |   |                   |
|---|-------------------|
| 1 Vinyl tape  | 3 Chipping primer |
| 2 Make sure the edge of the tape is aligned with the edge of the chipping primer. |                   |

14. Prepare nozzle No. 2 for the application of the silicone sealant as shown on the following pictures.



MSP1\_082

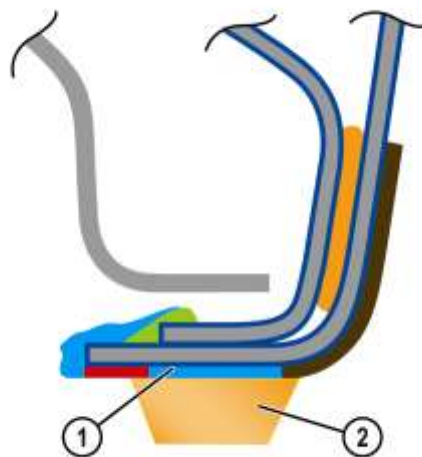
15. Apply the silicone sealant to all along the flange surface.



MSP1\_018

1 Silicone sealant

16. Spread the silicone sealant all along the flange surface by using a spatula.



MSP1\_019

1 Silicone sealant

2 Spatula



**Correct**

MSP1\_020



**Incorrect**

MSP1\_021

**NOTE:** If the spatula is set vertically to the flange surface, streams will appear on the silicone sealant. Set the spatula at an angle of 45 degrees against the flange. Do NOT allow air bubbles to be trapped into the silicone sealant.

**NOTE:** Because the spatulas can be used several times, ensure there are no grooves or scratches on the surface of the spatulas before smoothen out the Silicone material.

**NOTE:** Smooth out the surface of the silicone sealant using a spatula IMMEDIATELY after the silicone sealant is applied. Otherwise, the silicone sealant gets hardened and uneven coating (marks) will easily appear.

**NOTE:** Do finish of the silicone sealant with the spatula from the front side to the rear side of the tyre arch at a brush. (Don't stop in the middle, or a poor appearance may occur in the joint area.)

17. Remove the vinyl tape immediately after the spreading process of silicone sealant has finished.

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### How To Peel Off the Vinyl Tape

- Remove the vinyl tape immediately after the silicone sealant has been spread and smoothed.
- When removing, the vinyl tape should be pulled toward the applied silicone sealant.
- If it is pulled to the wrong side, the applied silicone sealant will be cling to the vinyl tape causing an unpleasant appearance at the visible corners of the silicone sealant.



MSP1\_022

18. Allow the silicone sealant to dry for approx. 30 minutes until skin formation has finished.

**NOTE:** If the vehicle will be kept at the dealership, allow the silicone sealant to dry for the whole day.  
(Because it will get completely dry.)

19. Reassemble the rear bumper with the screws.

20. Reassemble the mud guards and the tires.

**NOTE:** Do not allow any damage to the applied silicone sealant.

21. Lower the vehicle.

### **Before returning the vehicle to the customer, be sure to pay attention to the following:**

- Do not drive in rain until the silicone sealant gets completely dry.
- If the customer is likely to drive on a rough road (where the vehicle is easily subject to stone chipping), return the vehicle after the silicone sealant is completely dry.

## Level 2 Repair procedure for rear wheel fender arch flange

22. Detach the tires, the mud guards and any other vehicle parts necessary to obtain clear access. Protect the other surrounding vehicle parts with suitable material such as masking paper or other protective materials which are usually employed in the body workshop.
23. Use an air tool with a wire brush or equivalent, to completely remove the paint sealer from the rear and inner area of the wheel arch.



BL-1010\_02024

24. Use a wire brush or equivalent tool, to clean the inside and outside of the rear fender arch from old paint and underbody protection material. Clean the entire surface from existing corrosion patterns.



BL-1010\_02025

**NOTE:** Remove the sealer from all the visible corroded areas.  
If necessary, also remove it from the rear side of the fender arch.

25. All areas which cannot be treated by the method described above must be sand blasted. This ensures that all traces of corrosion plus dirt and sealer or paint residues are removed completely.



BL-1010\_02026

**NOTE:** If you will discover black or grey spots on the bare sheet metal as shown on the picture below, remove them by grinding them off to the blank metal. Such spots are caused by a damaged phosphate coating and need to be removed accurate. Otherwise the corrosion protection measures are not sufficient.



BL-1010\_02104

26. Remove any loose rust from the spaces between the panels using an oscillating tool.



BL-1010\_02027

27. Carefully deburr the cut edges of all the panels (rear quarter panel, wheelhouse on the inside) using abrasive paper. This will improve the adhesion when paint sealer (IV) and varnish are applied to the edges of the panels later.



BL-1010\_02028

28. Apply pure hardener (XII) to the joined surface all along the rear fender panel. Allow the material to penetrate in between the panels.



BL-1010\_02029

**NOTE:** Allow the hardener (XI) to penetrate for at least 30 minutes.

29. Wipe off surplus hardener (XI) by using a suitable cleaning agent (VIII).
30. Clean and degrease those surfaces where the corrosion has been removed.
31. Apply corrosion protection primer (I) over the entire repair area and make sure that all the bare surfaces are treated.



BL-1010\_02030

32. Apply primer surfacer (III) over the repair area and let it dry. Lightly sand the surface with (500 grit) abrasive paper and then clean it to remove any surface irregularities.



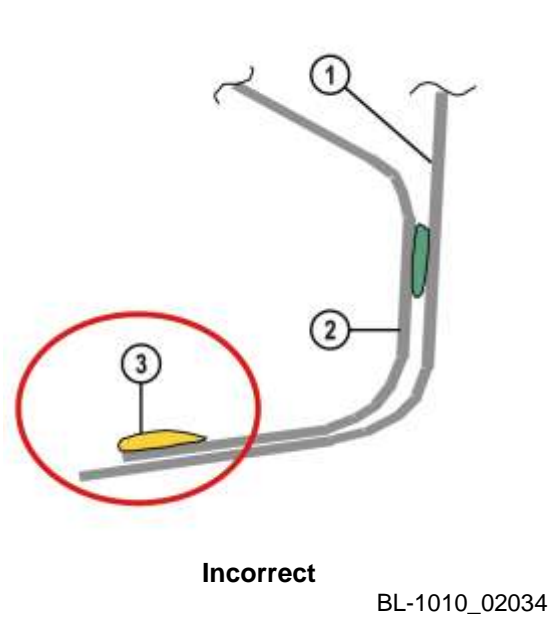
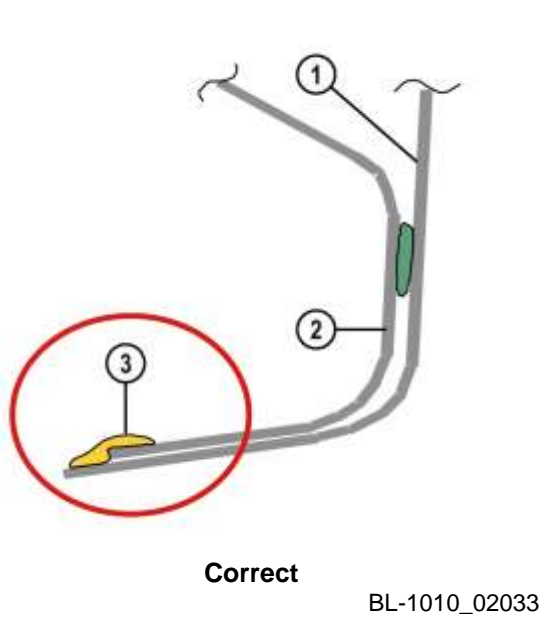
BL-1010\_02031

33. Apply paint sealer (IV) over the entire inner edge of the fender arch (from the rocker panel to the mounting point of the bumper).



BL-1010\_02067

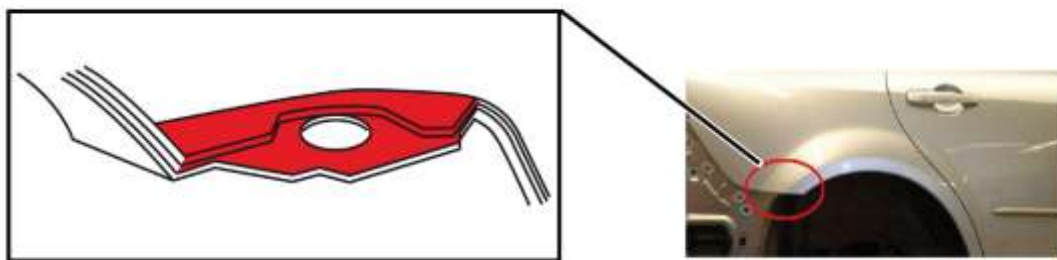
**NOTE:** Make sure that paint sealer (IV) is applied exactly in the area of the junction between the outer panel and the inner panel as shown in the diagram on the left below.



- 1 Rear quarter panel
- 2 Wheelhouse

- 3 Paint Sealer (IV)

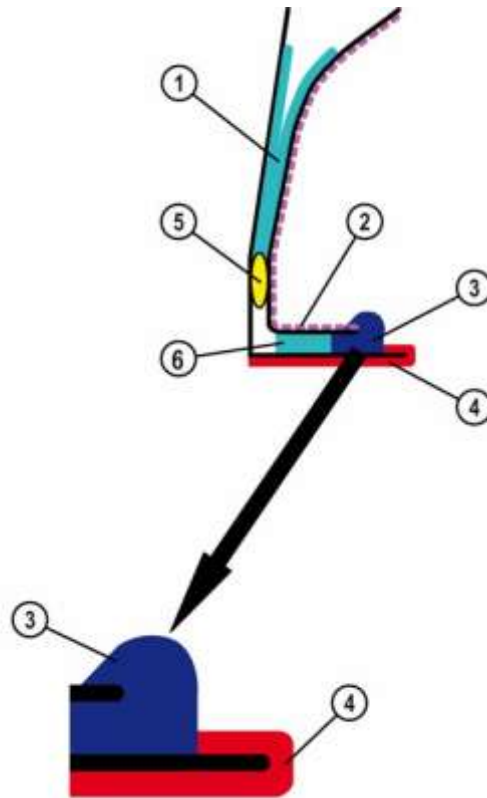
34. In the same way, also apply additional paint sealer (IV) to the area where the rear bumper meets the outer panel and the inner panel (see illustration below)



Area where the rear bumper meets the outer panel and the inner panel

BL-1010\_02102

35. Apply stone chip protection material (VI or VII) in the affected area as shown on the illustration below **No.2.**
36. Apply the stone chip protection material (VI or VII) to the flange arch that it covers the edge of the panels as illustrated below **No.4.**



BL-1010\_02036

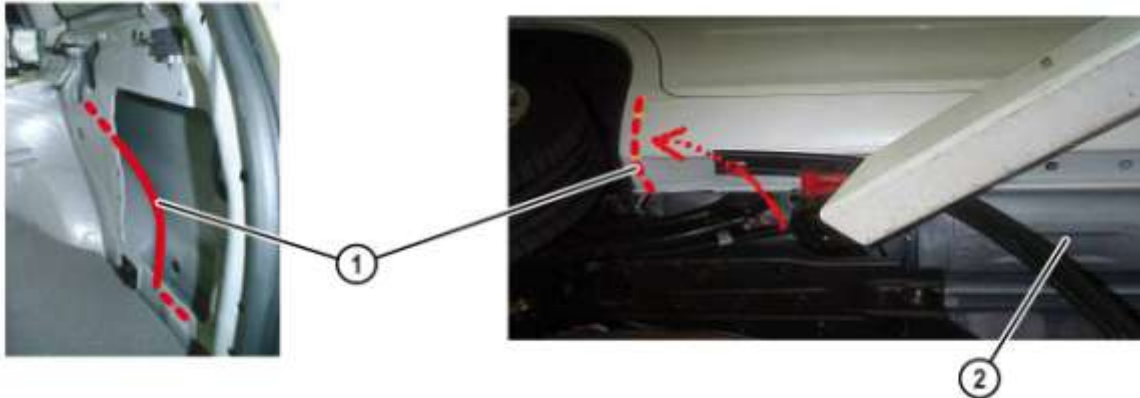
- |   |  |   |  |
|---|--|---|--|
| 1 | Anti-corrosion wax (V)                     | 4 | Stone chip protection material (VI or VII) |
| 2 | Stone chip protection material (VI or VII) | 5 | Factory applied adhesive sealer            |
| 3 | Paint sealer (IV)                          | 6 | Hardener                                   |

37. Apply the finishing paint.



## 38. Apply anti-corrosion wax (V) from the inside:

- Remove the trim.
- Treat the area between the inner wheelhouse and the rear quarter panel with anti-corrosion wax (V) from the inside. Guide a hose into the area between inner and outer panel.



BL-1010\_02037

1 Apply Anti-corrosion wax (V)

2 Rocker panel

- Guide a hose into the opening in the rocker panel for cavity sealing and apply anti-corrosion wax (V) to the junction between the inner and outer panels.
- Allow the anti-corrosion wax (V) to penetrate to the areas between inner and outer panel from the inside over the entire length of the wheel arch.



BL-1010\_02067

## 39. Refit the trims, mud guard, rear tire and the rear bumper.

## 40. Remove all visible material residues from the vehicle and handle the car back to the customer.

## Repair procedure for replacement of rear fender panel

### Repair procedure

41. Detach the rear bumper, rear tire and mud guard on the side to be repaired.
42. Detach all the attached parts and trim, e.g. rear scuff plate, wheelhouse trim, inner side luggage compartment trim, upper side luggage compartment trim, lower side luggage compartment trim, etc. on the side to be repaired.

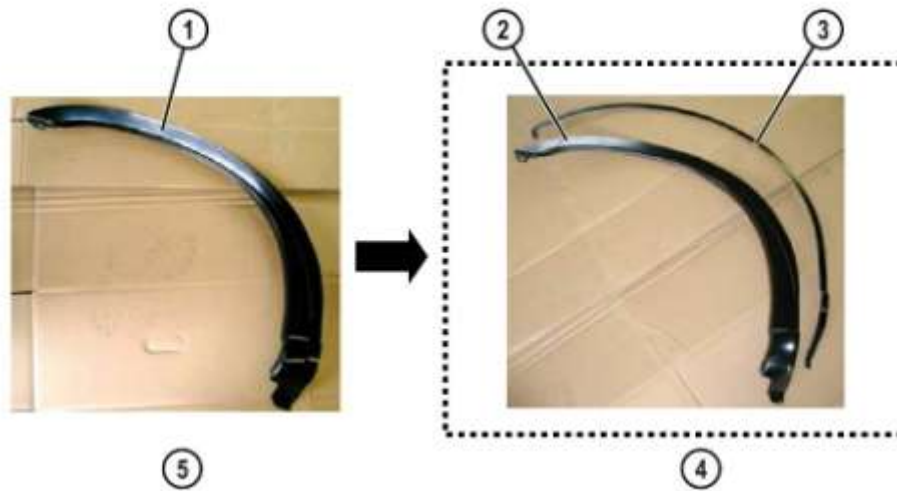


BL-1010\_02075

43. For preparation of the repair panel first roughly mark out the area to be repaired and then cut out a matching section from the service part or a rear quarter panel using a suitable tool such as a pneumatic saw or similar. Also cut a suitable weld backing strip to size.

**NOTE:** Service parts for the rear quarter panel are available for the 626 Wagon / Sedan / Hatchback, 323 Hatchback,

**NOTE:** Part No. for Mazda3 Sedan / Hatchback and Mazda6 Wagon / Sedan / Hatchback repair panel can be found on SI E058/07



Picture shows service parts for Mazda 626

BL-1010\_02076

- |   |                                |   |                        |
|---|--------------------------------|---|------------------------|
| 1 | Service part                   | 4 | After cutting to size  |
| 2 | Section cut to size            | 5 | Before cutting to size |
| 3 | Weld backing strip cut to size |   |                        |

44. Fit outer repair panel onto remaining outer panel and secure in place.



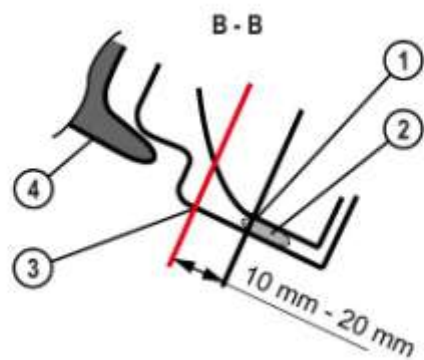
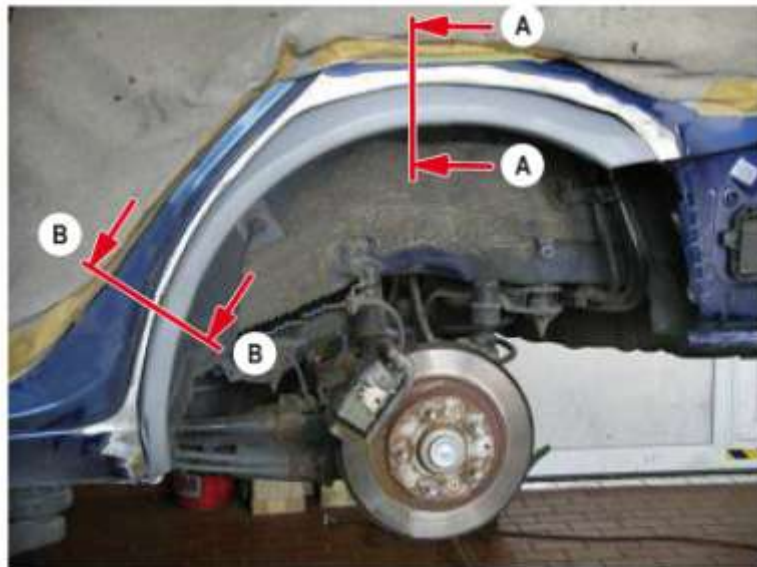
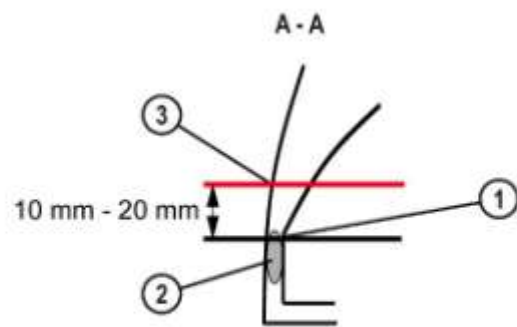
BL-1010\_02085

45. Mark cut line on remaining outer panel along repair panel.



BL-1010\_02077

**NOTE:** The cut line varies from model to model. Therefore please make the cut as specified for the particular model. As an example, the cut line on the rear quarter panel of the Mazda 626 (GF/GW) is shown in the following diagram.



BL-1010\_02079

- |   |                                 |   |           |
|---|---------------------------------|---|-----------|
| 1 | Marked location on inner panel  | 3 | Cut line  |
| 2 | Factory applied adhesive sealer | 4 | Rear door |

**NOTE:** Starting from the marked location on the inner panel, cut 10-20 mm off the rear quarter panel (outer panel).

46. Cut out the rear quarter panel along this line using a suitable tool such as a pneumatic saw, etc. Leave sufficient material for easy overlapping if not using a trimmed weld backing strip.
47. If necessary, mark the centre points of the spot welds (10 spot welds) on the flange with a centre punch and drill out using a spot weld drill (diameter: approx. 8.0 mm).

**NOTE:** If necessary, remove the stone chip protection material applied in the area of the rocker panel using a wire brush to locate the spot welds more easily.



- 1 Before removing spot welds
- 2 After removing spot welds

- 3 Remove stone chip protection material

BL-1010\_02080

48. Remove the burrs from the drilled spot welds.
49. Correct any deformation of the fender arch when necessary.
50. Heat the area in which the factory applied adhesive sealer is applied using a hot air blower (650 W) and detach the panel.

51. Remove all rust and sealer between the inner and outer panels using a wire brush or a knife so that the Hardener will spread better later.
52. Then clean the area. Work along the dotted line with a wire brush.



BL-1010\_02087

**NOTE:** If corrosion and/or sealer cannot be removed with a wire brush or knife, use sand blasting equipment.

**NOTE:** If you will discover black or grey spots on the bare sheet metal, remove them by grinding them off to the blank metal. Such spots are caused by a damaged phosphate coating and need to be removed accurate. Otherwise the corrosion protection measures are not sufficient.

53. If you discover perforation or severe corrosion on the inner panel which cannot be removed completely, a sectional replacement of the inner panel might be necessary. Otherwise continue with step 27



BL-1010\_02200

54. Cut inner repair panel out of inner panel service part to a size that covers all the affected areas.  
55. Fit the inner repair panel on top of the existing inner panel and secure it in place.



BL-1010\_02172



56. Mark line on existing inner panel along edges of inner repair panel.

57. Drill out the spot welds from the inner panel which are necessary to remove the section to be replaced.



BL-1010\_02174

**NOTE:** Wherever possible it is recommended to use spot welding technique to fix the repair panels instead of MIG/MAG welding.

58. Cut out the section, but leave 10mm for overlapping in the spot welding areas.



BL-1010\_02175

59. Sand all welding areas down to bare metal.

**NOTE:** Insure to remove the phosphate coating from all welding areas.

60. Prepare an joggled edge for the overlapping joint seam.



BL-1010\_02176

61. If you discover severe corrosion or perforation on the node plate renew also the node plate.



BL-1010\_02178

62. Remove residues of paint, underbody protection, sealer and surface corrosion by grinding and apply corrosion protection primer (I) to the node plate



BL-1010\_02179

63. Apply weld primer (II) to all spot weld areas (on remaining and new parts).

**NOTE:** Leave MIG/MAG welding areas clean. These areas must be protected after welding.

64. Fit inner repair panel and secure in place.
65. Spot weld the inner repair panel. MIG/MAG weld all other locations.



BL-1010\_02186

66. Clean weld seams on inner repair panel using cleaning agent (VIII).
67. Apply corrosion protection primer (I) to all bare metal surfaces that are not used to weld the outer repair panel.
68. Cut out the flange and bumper areas of the weld backing strip.
69. Cut the weld backing strip into two parts (weld backing strip A and weld backing strip B in the picture).
70. Remove all paint from the backing strips A and B
71. Secure weld backing strip A using a screw clamp.

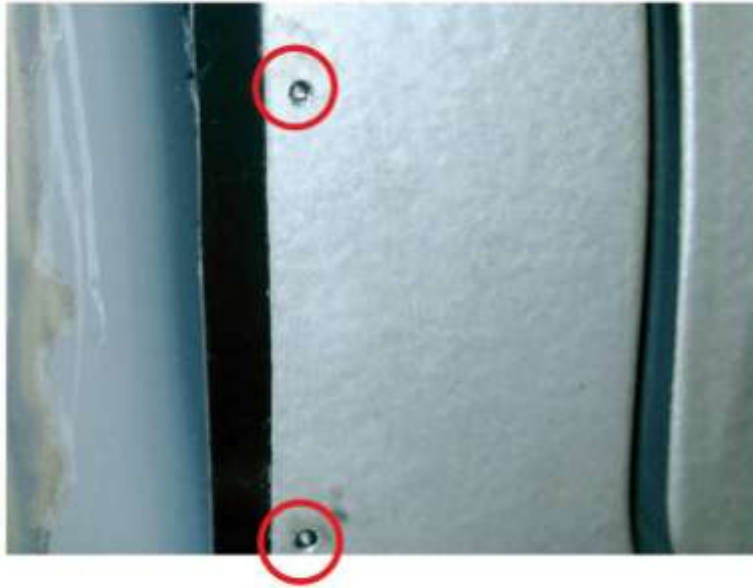


BL-1010\_02082

1 Weld backing strip A

2 Weld backing strip B

72. Drill holes (diameter: 3 mm) for welding with a spacing of 10 cm.



- 73. Remove the burrs from the holes drilled for welding.
- 74. Weld backing strip A in place, ensuring that it is not distorted.
- 75. Attach weld backing plate B as described in steps 31) to 34).

BL-1010\_02083



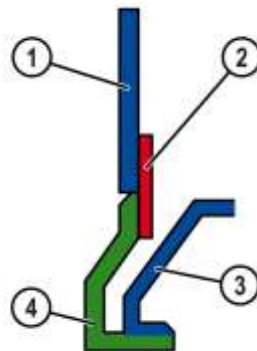
BL-1010\_02084

76. Attach the outer repair panel to the vehicle again.



BL-1010\_02085

77. Secure the outer repair panel in the correct position with screw clamps.



BL-1010\_02106

- 1 Rear quarter panel on outside
- 2 Weld backing strip

- 3 Inner panel
- 4 Outer repair panel

78. Degrease the welding area.



BL-1010\_02087

79. Tack weld the repair panel in the correct position. Remove the burrs from the tacking welds.



BL-1010\_02088

80. Weld the repair panel to the rear quarter panel with a stepped MIG/MAG weld seam.

**NOTE:** Make sure that the part is not distorted. If necessary, weld in a number of steps.



BL-1010\_02089

81. Spot weld the flange on the repair panel to the wheelhouse.

**NOTE:** Calculate the required spacing between the individual spot welds for a total of 10 spot welds on the entire flange.



BL-1010\_02090



82. Restore the external contours in the repair area and if necessary remove the high points produced by the welding. Also dress the spot welds on the fender arch flange and when necessary remove burrs from the spot welds.



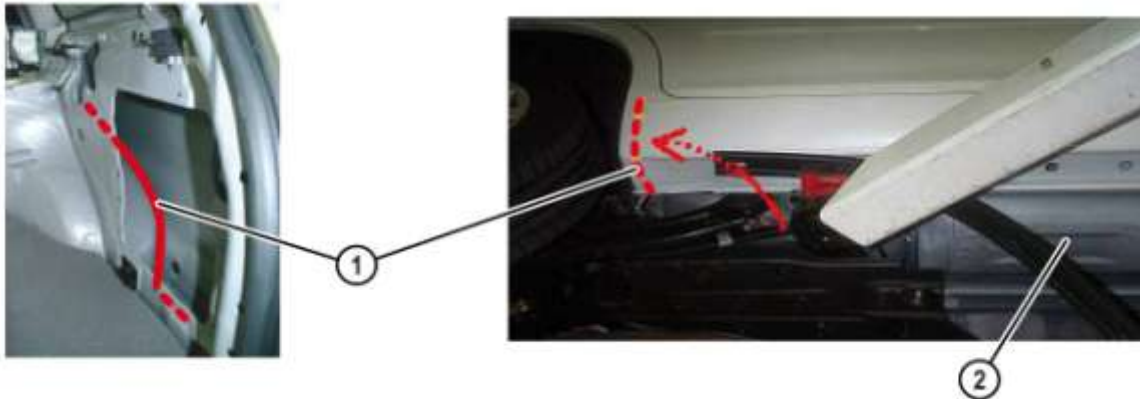
BL-1010\_02091

83. Tin the outer surface as shown in the following picture to prepare the repair area for the subsequent application of paint.



BL-1010\_02092

84. Arrange the top coat as per description of Level 2 Repair Procedure for Rear Fender Wheel Arch.
85. Apply anti-corrosion wax (V) from the inside:
- Remove the trim.
  - Treat the area between the inner wheelhouse and the rear quarter panel with anti-corrosion wax (V) from the inside. Guide a hose into the area between inner and outer panel.



BL-1010\_02037

1 Apply Anti-corrosion wax (V)

2 Rocker panel

- Guide a hose into the opening in the rocker panel for cavity sealing and apply anti-corrosion wax (V) to the junction between the inner and outer panels.
- Allow the anti-corrosion wax (V) to penetrate to the areas between inner and outer panel from the inside over the entire length of the wheel arch.

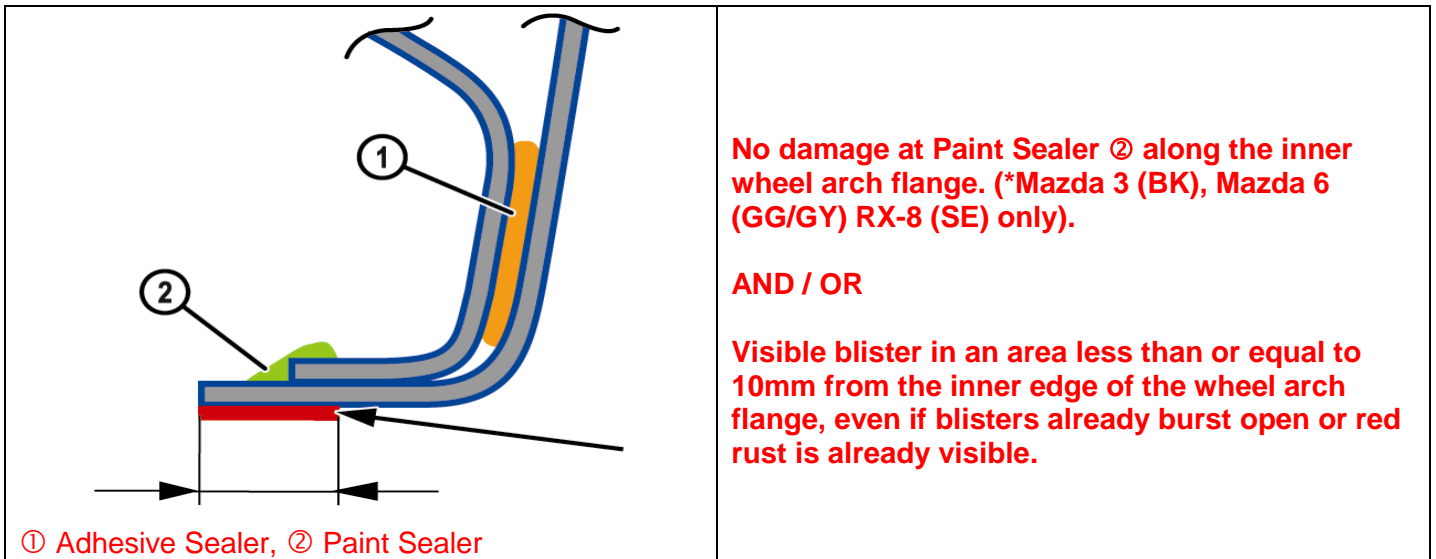


BL-1010\_02067

86. Refit the trims, rear wheels and the rear bumper.
87. Remove all visible material residues from the vehicle and handle the car back to the customer.

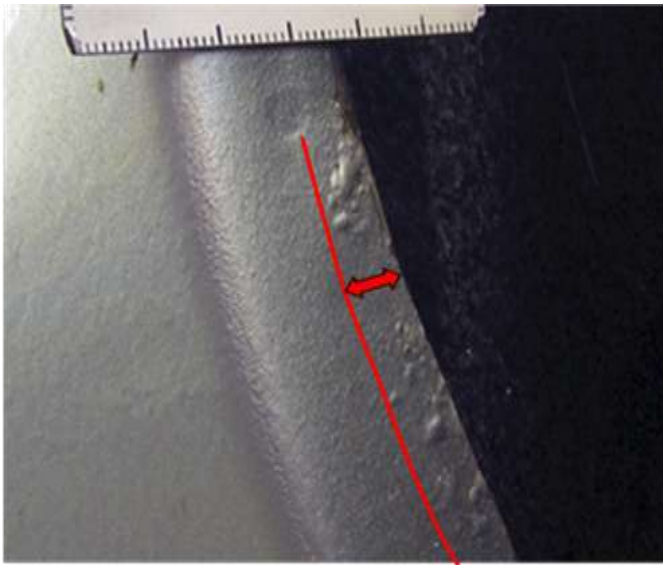
## APPENDIX A – Guideline for Corrosion Level Assessment

### Definition of Corrosion Level - 1



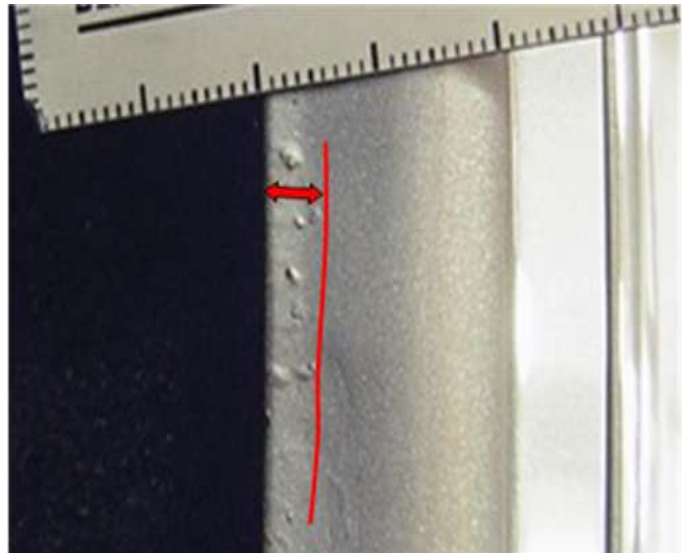
\* Because no Paint Sealer has been applied to this area in production, 323, MPV and Premacy are not affected by these criteria.

Photo #1



Small blisters can be detected at the flange area, but spread is less than or equal to 10mm from the inner edge of the flange.

Photo #2



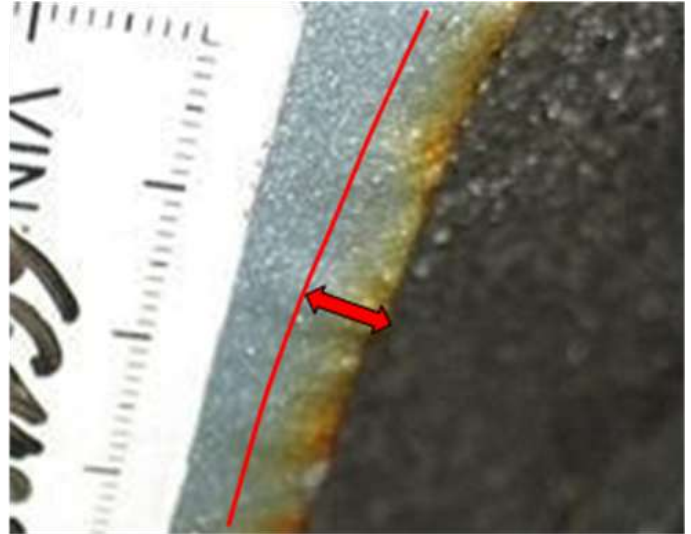
Small blisters can be detected at the flange area, but spread is less than or equal to 10mm from the inner edge of the flange.

Photo #3



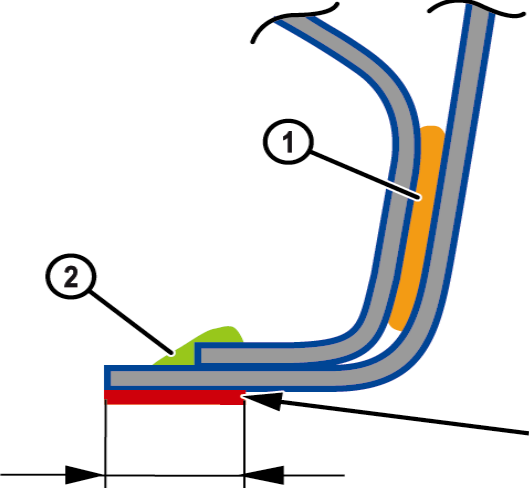
A single big blister can be detected on the flange but blister dimensions are within or equal to 10mm from inner edge of flange

Photo #4



Gentle red rust appears starting from inner edge of flange, but spread is less than or equal to 10mm from the inner edge of wheel arch.

**Definition of Corrosion Level – 2**

 <p>① Adhesive Sealer, ② Paint Sealer</p>	<p><b>Paint Sealer ② broken or damaged.</b> <b>(*Mazda 3 (BK), Mazda 6 (GG/GY) RX-8 (SE) only).</b></p> <p><b>AND / OR</b></p> <p><b>Visible blister and/or red rust in an area more than 10mm from the inner edge of the wheel arch flange.</b></p> <p><b>(Please refer to below sample pictures)</b></p>
--	--

\* Because no Paint Sealer has been applied to this area in production, 323, MPV and Premacy are not affected by these criteria.

**Photo #1**



Visible blisters in an area more than 10mm from the inner edge of the wheel arch.

**Photo #2**



Visible blisters and red rust in an area more than 10mm from the inner edge of the wheel arch.

**Photo #3**



Visible blisters and red rust in an area more than 10mm from the inner edge of the wheel arch.

**Photo #5**



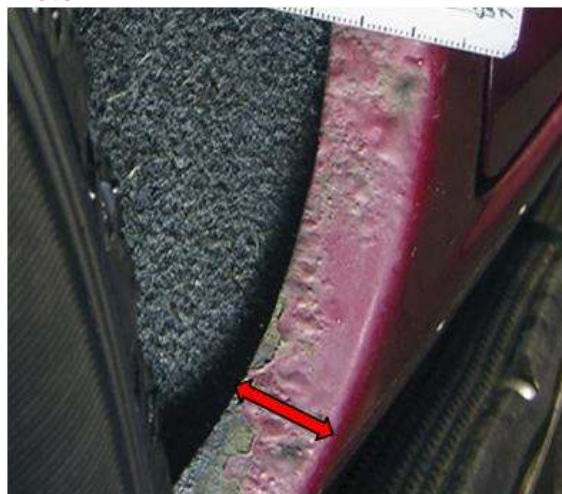
Single blister caused by chipping in an area more than 10mm from the inner edge of the wheel arch arch.

**Photo #7**



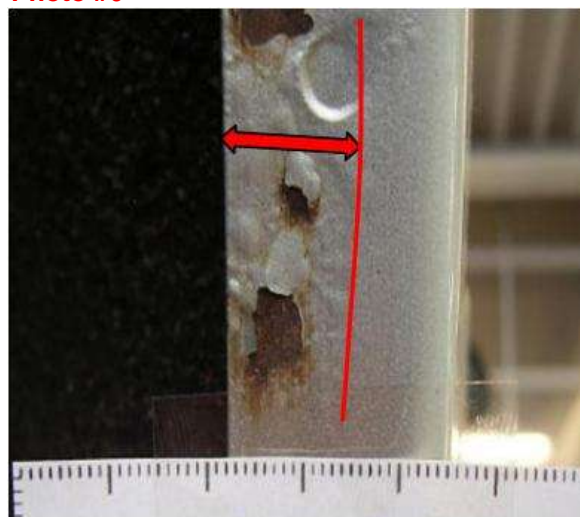
Red rust in an area more than 10mm from the inner edge of the wheel arch.

**Photo #4**



Visible blisters and red rust in an area more than 10mm from the inner edge of the wheel arch.

**Photo #6**



Paint peeling and red rust in an area more than 10mm from the inner edge of the wheel arch.

Photo #8



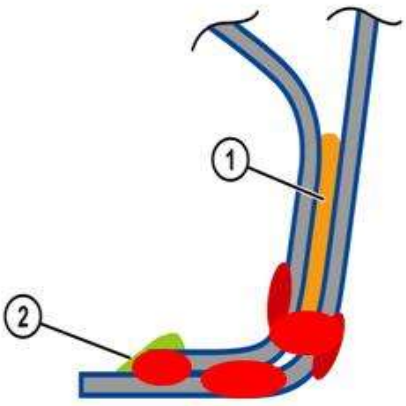
Visible blisters and red rust at vertical surfaces of wheel arch or rear bumper attachment area will not lead to level-3 as long as no proof for perforation can be detected.

Photo #9



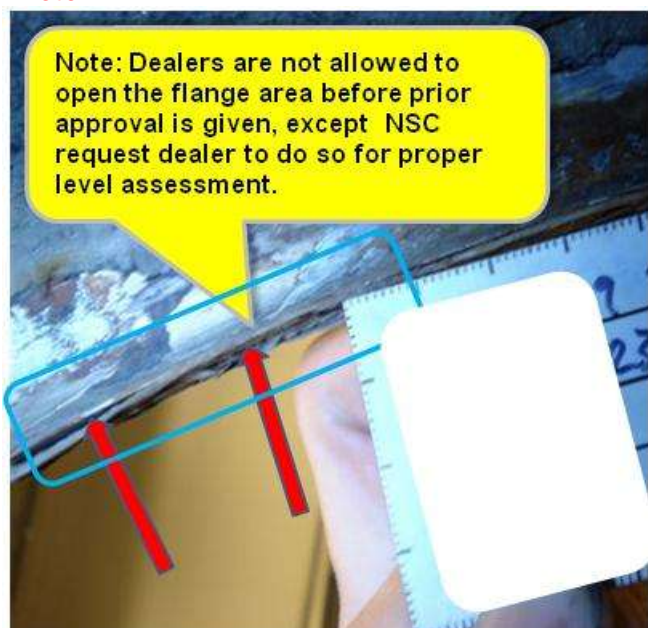
Visible blisters and red rust at vertical surfaces of wheel arch or rear bumper attachment area will not lead to level-3 as long as no proof for perforation can be detected.

### Definition of Corrosion Level – 3

 <p>① Adhesive Sealer, ② Paint Sealer</p>	<p><b>Perforation on outer rear fender panel.</b></p> <p><b>AND/OR</b></p> <p><b>Perforation on inner rear fender panel.</b></p> <p><b>AND/OR</b></p> <p><b>Severe corrosion in-between inner and outer panel which leads to a natural expansion of the metal sheets at the flange are.</b></p> <p><b>(Please refer to below sample photos)</b></p>
--	---

\* Because no Paint Sealer has been applied to this area in production, 323, MPV and Premacy are not affected by these criteria.

**Photo #1**



Severe corrosion between metal sheets which leads to a natural expansion of the flange area.

**Photo #2**



Visible blisters and red rust in an area more than 10mm from the inner edge of the wheel arch.



**Photo #3**



Part of the inner wheel house is perforated by corrosion from the outside.

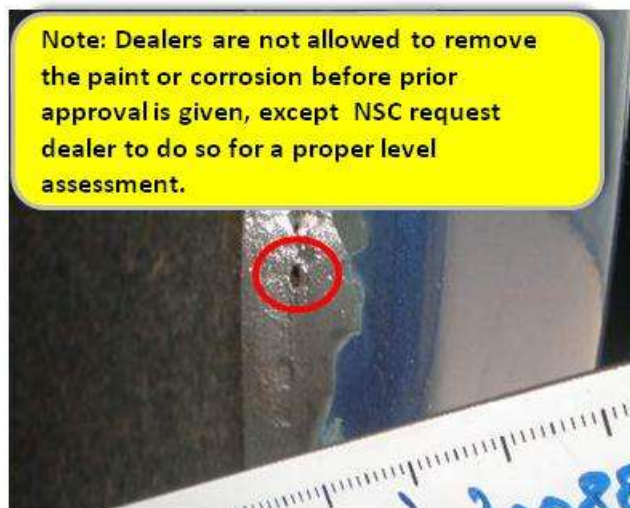
**Photo #4**



**<Before removing paint and corrosion>**

No visible perforation corrosion can be detected with the initial inspection, which leads to a level-2 assessment in the first step.

**Photo #5**



**<After removing paint>**

Perforation corrosion becomes visible under the blisters shown on photo #4. This perforation justifies the assessment for level-3.