

SECTION PG

PAINT GUIDE

CONTENTS

Blisters.....	2	Fade: Blackout Panel Fade.....	24
Boil.....	3	Fade.....	25
Buff Marks.....	4	Grin Through.....	26
Chipping: Door Edge Chips.....	5	Loss of Gloss.....	27
Chipping: Stone Chips.....	6	Mottling (Shading).....	28
Chipping: Wheel Well Chips.....	7	Orange Peel.....	29
Colour Mismatch.....	8	Overspray.....	30
Cracking.....	9	Peeling: Bumper Peeling.....	31
Craters / Fish Eye.....	10	Peeling: Bumper Scrapes.....	32
Dent: Inward.....	11	Peeling: Clearcoat Peeling.....	33
Dent: Outwards.....	12	Peeling: Colourcoat Peeling.....	34
Dirt in Paint: Fibre / Hair.....	13	Peeling: Grille Peeling.....	35
Dirt in Paint: Rash / Dirt.....	14	Paint Guards: Paint Guard Film	
Dirt in Paint: Sanding Debris.....	15	(PGF) Stains.....	36
Environmental: Acid Rain.....	16	Paint Guards: Paint Guard Coat	
Environmental: Bird Droppings.....	17	(PGC) Remains.	37
Environmental: Chemical		Poor Spot Repair.....	38
Contamination	18	Runs & Drips.....	39
Environmental: Hard Water Spots....	19	Scratches: Sanding Scratches / Marks.	40
Environmental: Insect Spots.....	20	Scratches: Surface Scratches.....	41
Environmental: Iron Particles.....	21	Stand Up.....	42
Environmental: Tree Sap Spots.....	22	Thin Paint.....	43
Excessive Sealer.....	23	Touch Marks.....	44

Blisters

Incident Description

Blistering appears as small swellings, pimples or bubbles on the surface of the paint. They are caused by improper surface preparation or moisture trapped beneath the paint surface.

The size of a blister can range from 0.5 to 1.5 mm in diameter and generally occur in patches, although they may also be found in isolation.

Warranty Policy

Blistering is covered under the paint warranty unless they are the result of a previous repair or a result of an impact / stone chip

Claim Coding

CC: 7

Paint fault = 027 Paint blister

CS: ZB

CT: 76

Vehicle Repair Method

Refinish

Diagnosis Questions

- **When was the vehicle painted?**

Blistering can take several months to begin, and can be the result of an improper repair.

- **Is the local environment humid?**

Paint application in high humidity can lead to blistering.

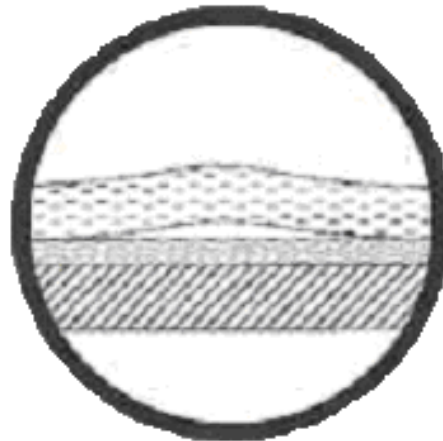
Similar Incidents

Dirt in Paint

Dirt in paint is usually more isolated. Refer to "Dirt in Paint: Fibre / Hair"

Recommended Explanation to Customer

- None



Example of non-warranty paint blister: cause - stone chipping



Example of warrantable blister.

Boil

Incident Description

Solvent / air trapped in high paint film build.

Warranty Policy

Boil is covered under the paint warranty

Claim Coding

CC: 7

Paint fault = 008 Boil

CS: ZB

CT: 71

Vehicle Repair Method

Colour coat repair

Diagnosis Questions

None

Similar Incidents

None

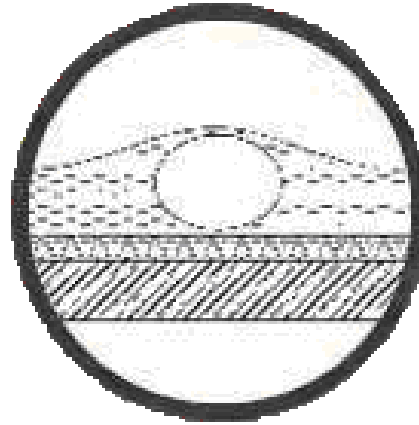
Recommended Explanation to Customer

- Not a regular defect in car manufacturing
- Defect will not affect the paint long term durability
- Dependent on size of the defect carry out recommended repair procedure
- If defect is small, recommend customer acceptance as it is.

Vehicle Repair Criteria

Repair zone 1 at dealership (PDI)

Repair zone 2 on customer complaint basis only



Buff Marks

Incident Description

Buff marks, polishing marks, or swirl marks are fine scratches in the paint. The marks generally appear in a circular or swirling pattern and have a shape and size similar to a buffing pad. A reduced gloss or a 3-D holographic effect may also be noticed on the paint. A dirty buffing pad or an improper polishing procedure may cause buff marks.

Warranty Policy

Buff Marks are covered under the paint warranty only at PDI.

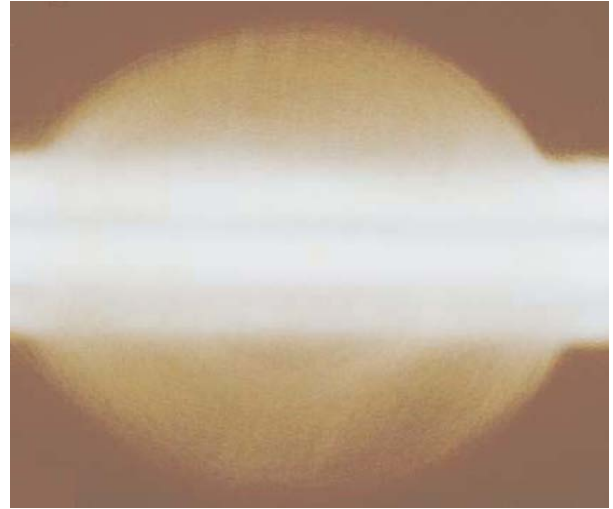
Claim Coding

CC: 7

Paint fault = 017 Discing / sanding mark

CS: ZB

CT: 78



Vehicle Repair Method

Polish hand buff repair (no new paint application required)

Diagnosis Questions

- **Is the vehicle new?**

The vehicle may have been improperly polished prior to delivery to the customer.

- **Has the recommended service procedure to correct buff marks been performed?**

Refer to the Technical Bulletin on the polishing procedures for correctly removing buff marks.

Similar Incidents

Surface scratches

Surface scratches are similar but are usually deeper and linear. Refer to "Scratches: Surface Scratches".

Recommended Explanation to Customer

- None

Vehicle Repair Criteria

None

Chipping: Door Edge Chips

Incident Description

Paint on the edge of the door will be chipped, with the primer coat or metal exposed. Impacting foreign objects when opening the door can cause this. Also, look for small chips on the doorframe

Warranty Policy

Door Edge Chips are not covered under the paint warranty

Claim Coding

Not Applicable

Vehicle Repair Method

Not Applicable



Diagnosis Questions

- **Does the vehicle stay in a parking lot?**

The most common cause of door edge chips is the result of contact with other vehicles in parking lots

Similar Incidents

Clearcoat Peeling

If the incident is clear-coat peeling, the damage may also be evident around door handles, and key cylinders. Refer to "Peeling: Clearcoat Peeling"

Recommended Explanation to Customer

- None

Vehicle Repair Criteria

None

Chipping: Stone Chips

Incident Description

Small chips of damaged or broken paint film may be evidence of stone chips. Stone chips are usually caused by stones on the roadway getting thrown up by vehicles in front impacting the leading face of the vehicle (hood, bumper, grille, etc.), causing small paint chips. The small chips can vary in size from 1 to 4 mm in diameter and expose the primer or substrate surface.



Warranty Policy

Stone Chips are not covered under the paint warranty.

Claim Coding

Not Applicable

Vehicle Repair Method

Not Applicable

Diagnosis Questions

- **Are chips present anywhere else on the vehicle besides the front?**

If so, the paint incident may be attributable to other causes.

- **Has the vehicle been in an accident?**

If so, the chipping could be attributable to an improper previous repair.



Similar Incidents

Wheel Well Chips

Paint chipping present in wheel wells. Refer to "Chipping: Wheel Well Chips"

Recommended Explanation to Customer

- To a certain level the paint can resist stone impact
- Stone impact damage will usually be limited to the impact area only

Chipping: Wheel Well Chips

Incident Description

Wheel well chips are found most prevalent on the lower rear quarter panels, lower front doors, and rocker panels where gravel is kicked up by the wheels. Look for chips on the back painted edges of wheel wells. Wheel well chips are common on vehicles driven in rural areas and in off-road conditions. In some cases, the vehicle could also have chips on the hood, fenders and bumper.

Warranty Policy

Wheel Well Chips are not covered under the paint warranty.

Claim Coding

Not Applicable

Vehicle Repair Method

Not Applicable

Diagnosis Questions

- **Does the car travel on dirt/gravel roads?**

Driving on dirt or gravel roads is the most common cause of this condition.

- **Has the vehicle been in an accident?**

Chipping could be a sign of an improper prior repair.

- **Are the stone chips in other locations?**

Chips found on the windshield, headlights, and/or side mirrors indicate the vehicle travels on gravel roads.

Similar Incidents

Stone Chips

Stone chip paint damage could also be found on other areas of the vehicle. Refer to "Chipping: Stone Chips"

Recommended Explanation to Customer

- None



Colour Mismatch

Incident Description

Colour mismatch is when adjacent body panels have slightly different colouring. Bumpers and spoilers are typical areas for potential paint colour mismatch.

This mainly occurs due to the paint chemistry and the painting process used on the different materials on the vehicle, (e.g. metal fender and plastic bumper fascia).

Note: Ensure that the vehicle is inspected in bright sunlight, under halo-gen lamps or "colour corrected" fluorescent lighting as other lighting conditions do not reveal true colours and may give a false mismatched appearance.



Warranty Policy

Colour Mismatch is covered under the paint warranty.

Claim Coding

CC: 7

Paint fault = 26 Colour mismatch

CS: ZB

CT: 14



Vehicle Repair Method

Colour coat repair

Diagnosis Questions

- **Has the vehicle been repaired?**

This incident is a common result of an improper repair.

- **Is one of the vehicle panels metal and the other plastic?**

Slight colour mismatch is normal with different materials. (E.g. metal fender and plastic bumper).

Similar Incidents

Loss of Gloss

Vehicle panels have a loss of glossy paint appearance. Refer to "Loss of Gloss".

Recommended Explanation to Customer

- Slight colour difference may occur between body and plastic parts because plastic parts are painted in a separate paint shop
- Defect will not affect the paint long term durability
- When only slight colour difference, recommend customer acceptance as it is

Vehicle Repair Criteria

Repair zone 1 and 2.

-

Cracking

Incident Description

The paint surface is cracked, resembling a dry lakebed. The size and length of the cracks varies. The cracking can also appear as a 3-pointed star. Cracking is rarely seen on a factory paint finish.

Warranty Policy

Cracking is covered under the paint warranty.

Claim Coding

CC: 7

Paint fault = 014 Paint peeling

CS: ZB

CT: 11



Vehicle Repair Method

Colour coat repair

Diagnosis Questions

- **What is the paint thickness?**

This incident is generally caused by excessive paint thickness. A paint thickness of 3.5 to 6 mils is normal

- **How varied is the local climate?**

Cracking can also be caused by exposure to repeated extreme temperature changes.

- **Is it environmental related?**

Cracking should not be confused with an environmental related incident such as a bird dropping.

Similar Incidents

Scrapes/Scratches

Scrapes and scratches can appear similar but they are usually more linear, and less random. Refer to "Scratches: Surface Scratches"

Bird Droppings

Bird dropping damage usually is evidenced as an isolated spot(s) on the horizontal panels of the vehicle. The paint can be cracked in a small area (approximately 20mm in diameter). The paint can also become discoloured and swelled as a result of a bird dropping. Refer to "Environmental: Bird Droppings"

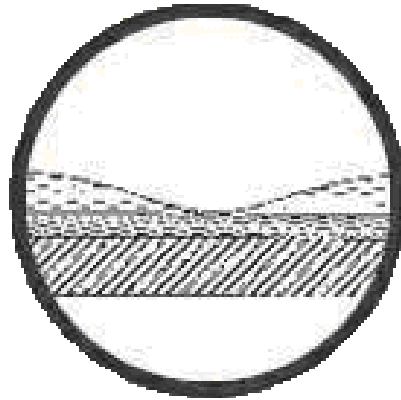
Recommended Explanation to Customer

- None

Craters / Fish Eyes

Incident Description

Craters (also called fish eyes) are small “crater-like” holes or indentations in the paint surface. Size varies from pinholes up to 10 mm in diameter. Usually the larger craters occur individually, while the smaller ones are often found in small densely packed clusters. Small impurities are often visible in the centre of the crater.



Warranty Policy

Craters and Fish Eyes are covered under the paint warranty.

Claim Coding

CC: 7

Paint fault = 002 Crater

CS: ZB

CT: 71

Vehicle Repair Method

Colour coat repair

Diagnosis Questions

- **Was the vehicle repainted or in an accident?**

A crater may be a sign of contamination from an improper paint repair. A common cause of craters is contamination (silicone, wax, grease, oil, etc.) in the environment or on the surface of the substrate during the painting process.

- **Are the craters isolated?**

Craters usually occur individually or in small groups.

- **Is it environmental related?**

Craters should not be confused with environmental related incidents.



Similar Incidents

Acid Rain Etch

Etch is more rough to the touch and generally covers large portions of only the horizontal surfaces. Refer to “Environmental: Acid Rain Etch”.

Bird Droppings

Bird droppings are isolated spots generally found on horizontal panels and the paint appears discoloured, swelled or may be cracked. Refer to “Environmental: Bird Droppings”

Recommended Explanation to Customer

- Not a regular defect in car manufacturing
- Defect will not affect the paint long term durability
- Dependent on size of the defect carry out recommended repair procedure, if defect is small, recommend customer acceptance as it is

Vehicle Repair Criteria

Repair zone 1 at dealership

Repair zone 2 on customer complaint basis only

Dent: Inward

Incident Description

See pictures.

Warranty Policy

Inward Dent is covered under the paint warranty only at PDI

Claim Coding

CC: 7

Paint fault = 063 Inward dent

CS: ZB

CT: 12

Vehicle Repair Method

Paintless dent repair

Diagnosis Questions

- None

Similar Incidents

None

Recommended Explanation to Customer

- Damage is mostly caused by secondary damage like incident during transportation or storage
- Damage is usually detected during pre delivery inspection

Vehicle Repair Criteria

Repair zone 1 and 2



Dent: Outward

Incident Description

See pictures.

Warranty Policy

Outward Dent is covered under the paint warranty only at PDI

Claim Coding

CC: 7

Paint fault = 062 Outward dent

CS: ZB

CT: 12

Vehicle Repair Method

Paintless dent repair

Diagnosis Questions

- None

Similar Incidents

None

Recommended Explanation to Customer

- Not a regular defect in car manufacturing
- Defect will not affect the paint long term durability
- If defect is small, recommend customer acceptance as it is

Vehicle Repair Criteria

Repair zones 1 and 2 only

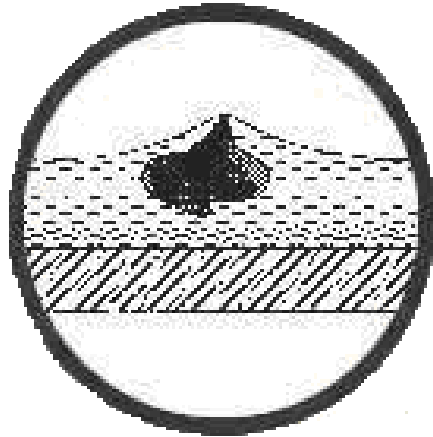
Repair only on customer complaint basis



Dirt In Paint: Fibre / Hair

Incident Description

Dirt in paint looks like tiny bumps in the paint surface. It is easily felt with the hand. This is caused by particles (fabric or human) of contaminant that stick to the paint as it is being applied and then get trapped inside. The particles are usually totally embedded in and covered by the paint film. The bumps are typically small in size from 1 to 3 mm in diameter.



Warranty Policy

Fibre or Hair in Paint is covered under the paint warranty.

Claim Coding

CC: 7

Paint fault = 004 Fibre (hair in paint)

CS: ZB

CT: 71

Vehicle Repair Method

Polish hand buff repair

If defect is large i.e. human hair, use colour coat spot repair



Diagnosis Questions

- **Has the vehicle been previously repaired?** Dirt in paint usually occurs during the repair process.

Similar Incidents

Blisters

Generally, blisters occur in patches. Refer to "Blisters".

Iron Particles

Iron particle spots will appear rust-coloured, with particles only partially embedded in the paint. Refer to "Environmental: Iron Particles".

Recommended Explanation to Customer

- Not a regular defect in car manufacturing
- Defect will not affect the paint long term durability
- Problem is easily rectified and is not a major repair
- Dependent on size of the defect carry out recommended repair procedure

Vehicle Repair Criteria

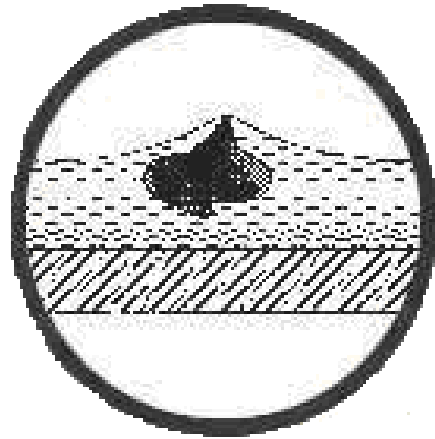
Repair zone 1 at dealership (PDI)

Repair zone 2 on customer complaint basis only

Dirt In Paint: Rash / Dirt

Incident Description

Dirt in paint looks like tiny bumps in the paint surface. It is easily felt with the hand. This is caused by particles (like dust) of contaminant that stick to the paint as it is being applied and then get trapped inside. The particles are usually totally embedded in and covered by the paint film. The bumps are typically small in size from 1 to 3 mm in diameter.



Warranty Policy

Rash or Dirt in Paint is covered under the paint warranty.

Claim Coding

CC: 7

Paint fault = 005 Rash (dirt in paint)

CS: ZB

CT: 71

Vehicle Repair Method

Polish and buff repair

Diagnosis Questions

- **Has the vehicle been previously repaired?**

Dirt in paint usually occurs during the repair process.

Similar Incidents

Blisters

Generally, blisters occur in patches. Refer to "Blisters".

Iron Particles

Iron particle spots will appear rust-coloured, with particles only partially embedded in the paint. Refer to "Environmental: Iron Particles".

Recommended Explanation to Customer

- Common problem in all car manufacturing (not irregular defect) Defect will not affect the paint long term durability
- Repairs may damage the factory paint finish and the long term durability may be affected
- Recommend to the customer acceptance as it is
- Repair only if the customer is adamant

Vehicle Repair Criteria

Repair to zones 1 and 2

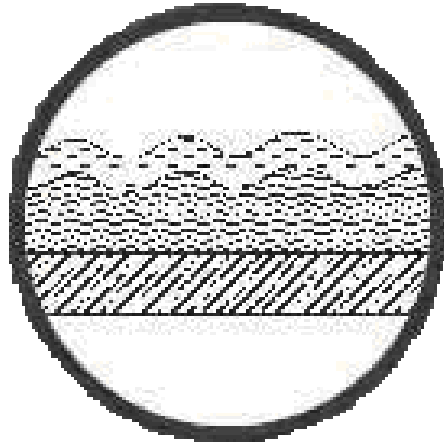
Repair only on customer complaint basis



Dirt In Paint: Sanding Debris

Incident Description

Dirt in paint looks like tiny bumps in the paint surface. It is easily felt with the hand. This is caused by particles (panel not cleaned sufficiently at primer sanding stage) of contaminant that stick to the paint as it is being applied and then get trapped inside. The particles are usually totally embedded in and covered by the paint film. The bumps are typically small in size from 1 to 3 mm in diameter.



Warranty Policy

Sanding Debris in Paint is covered under the paint warranty.

Claim Coding

CC: 7

Paint fault = 006 Sanding Debris

CS: ZB

CT: 71

Vehicle Repair Method

Colour coat repair (spot repair)

Diagnosis Questions

- Has the vehicle been previously repaired?

Dirt in paint usually occurs during the repair process.



Similar Incidents

Blisters

Generally, blisters occur in patches. Refer to "Blisters".

Iron Particles

Iron particle spots will appear rust-coloured, with particles only partially embedded in the paint. Refer to "Environmental: Iron Particles".

Recommended Explanation to Customer

- Not a regular defect in car manufacturing
- Defect will not affect the paint long term durability
- Dependent on size of the defect carry out recommended repair procedure
- If defect is small, recommend customer acceptance as it is

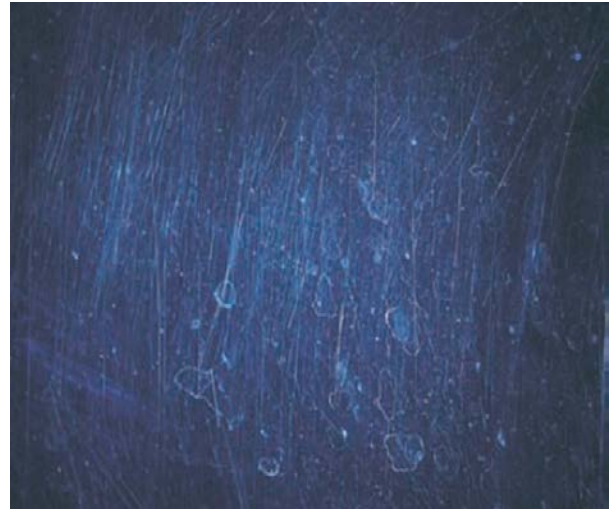
Vehicle Repair Criteria

Repair zones 1 and 2 at dealership Repair to zones 1 and 2 only

Environmental: Acid Rain Etch

Incident Description

Acid rain etch to exterior paint occurs from industrial or environmental contaminants, which settle on the vehicle and when combined with rain or a morning dew, form acid. If the droplets are allowed to evaporate on the vehicle, the acids concentrate and can etch the paint. The longer contaminants remain on the paint the more serious the damage. Acid rain damage looks like irregular spots, which occur from hard water residue. Craters can be felt with a fingernail where the etching has occurred. Size may vary from pinpoint to 13 mm in diameter and would be most apparent on the horizontal surfaces of the vehicle.



Warranty Policy

Acid Rain Etch is not covered under the paint warranty.

Claim Coding

Not Applicable

Vehicle Repair Method

Not Applicable

Diagnosis Questions

- **Is the vehicle from an industrial region?**

This environmental incident area is where acid rain is most prevalent.

- **Are the spots covering large portions of the horizontal body panels?**

If the spots are only on isolated panels, the incident damage might be a result of another circumstance.

Similar Incidents

Bird Droppings

Bird drops are generally isolated spots. Refer to "Environmental: Bird Droppings".

Chemical Contamination

A chemical spill usually is limited to one area. Refer to "Environmental: Chemical Contamination".

Hard Water Spots

Hard water spots look similar but are rarely etched into the paint. Refer to "Environmental: Hard Water Spots".

Insect Spots

Insect spots generally appear on the front and leading panels. Refer to "Environmental: Insect Spots".

Tree Sap Spots

Tree sap spots will be more grouped, sticky to the touch and may have a swelled appearance. Refer to "Environmental: Tree Sap Spots".

Recommended Explanation to Customer

- None

Environmental: Bird Droppings

Incident Description

Bird droppings appear as white, gray or discoloured irregular splotches usually up to 25 mm in diameter. If bird droppings were left on the paint, the chemical nature of the bird dropping may cause the paint to discolour, swell, bubble or crack. The damaged spot or splotch will be in the shape of the bird drop.

Warranty Policy

Bird Droppings are not covered under the paint warranty.

Claim Coding

Not Applicable

Vehicle Repair Method

Not Applicable

Diagnosis Questions

- **Is the vehicle usually parked outside under a lamp post or sign?**

This increases the possibility of exposure to bird droppings.

- **Is the vehicle dirty?**

Bird droppings generally should not create a paint incident if they are cleaned off the vehicle soon after exposure.

Similar Incidents

Acid Rain Etch

Acid rain etch spots are more grouped and are generally seen only on the horizontal panels. Refer to "Environmental: Acid Rain Etch".

Chemical Contamination

Chemical contamination may discolour the paint. Refer to "Environmental: Chemical Contamination".

Insect Spots

Insect spots are usually smaller in size and appear mostly on the front and leading panels. Refer to "Environmental: Insect Spots".

Tree Sap Spots

Tree sap spots appear more grouped and are generally uniform in shape and size. Refer to "Environmental: Tree Sap Spots".

Cracking

Bird drop damage should not be confused with paint cracking. Paint cracking damage would appear as a much larger affected area on the panel. Refer to "Cracking"

Recommended Explanation to Customer

- Some aggressive substances in bird droppings can cause permanent paint damage
- To prevent this kind of damage a bird dropping should be removed as soon as possible
- Damage can be prevented by regular car washing



Environmental: Chemical Contamination

Incident Description

Chemical contamination can range in size from small spots to a large affected area. A chemical contamination incident appears as an area of discoloured or etched paint, which has definite edges. Damage is usually limited to one area of the vehicle, but can cover the entire vehicle.

Warranty Policy

Chemical Contamination is not covered under the paint warranty.

Claim Coding

Not Applicable

Vehicle Repair Method

Not Applicable

Diagnosis Questions

- **Does affected damage area end with a distinctive edge?**

Look for areas on the same panel with distinctive difference: damage, no damage. The damage does not appear to blend with the paint.

- **Are marks limited to one area?**

Most chemical spills are usually localized to one area on the vehicle.

- **Is the battery new?**

If the battery has been recently replaced, an acid spill may have occurred. Generally, battery acid spillage is confined to a small area near the battery.

- **Did the vehicle spend time near airports or shipyards?**

Jet fuel and diesel emissions are possible causes. Chemical contamination damage is frequently found on vehicles that spend time near airports or shipyards. It is generally caused from unburned exhaust fuel that empties into the air and settles on the vehicle panels. These petroleum spots appear as small purplish-blue coloured spots about 1 to 3 mm diameter.

Similar Incidents

Acid Rain Etch

Acid rain etch damage will generally cover the entire horizontal surfaces of the vehicle. Refer to "Environmental: Acid Rain Etch".

Recommended Explanation to Customer

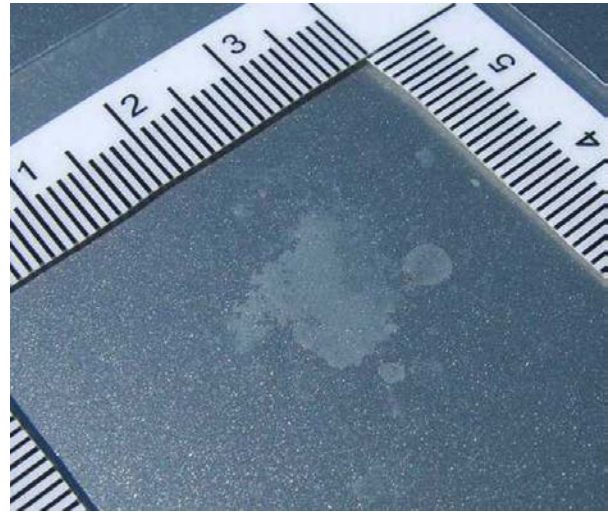
- None



Environmental: Hard Water Spots

Incident Description

Hard water spotting forms when rain, or water from the garden hose or lawn sprinklers dries on the paint surface. When the water evaporates, hard minerals remain and create a round white ring. The rings or spots can be irregular in shape and usually lighter in colour than the surrounding surface. The size of the rings or spots is normally about 6 mm in diameter. Performing a buff and polish procedure will usually correct this incident.



Warranty Policy

Hard Water Spots are not covered under the paint warranty.

Claim Coding

Not Applicable

Vehicle Repair Method

Not Applicable

Diagnosis Questions

- **Does the owner wash the vehicle by hand?**

Vehicles should be washed and dried in the shade to prevent rapid drying of water droplets on the paint.

- **Are the spots only on horizontal surfaces?**

The vertical surfaces of the vehicle are less likely to exhibit hard water spots.

- **Do the spots appear to be deposits on the paint surface, or are they etched into the paint?**

Hard water spots rarely etch into the surface of the paint.

Similar Incidents

Acid Rain Etch

Acid rain spots are usually etched into the horizontal surface of the paint. Refer to "Environmental: Acid Rain Etch".

Chemical Contamination

Chemical contamination can appear on vertical surfaces as well, and won't easily wash off. Refer to "Environmental: Chemical Contamination".

Recommended Explanation to Customer

- None

Environmental: Insect Spots

Incident Description

Insect spots occur when insects impact the vehicle as it travels along the road. Look for marks with irregular shapes and discoloration on the vehicle front and leading edge panels. Insect spots occur most often in the spring and summer months, and in humid environments. Insect spots left on a vehicle may cause the paint surface to raise and/or crack. Size may vary from 3 to 25 mm in diameter.



Warranty Policy

Insect spots are not covered under the paint warranty.

Claim Coding

Not Applicable

Vehicle Repair Method

Not Applicable

Diagnosis Questions

- **Where are the marks located?**

Insect spots usually occur on the front, or leading edges of the vehicle. If the vehicle has been hauled on a carrier facing backwards, insect damage could occur to the back of a vehicle.

- **Is the local environment humid?**

Insects are more plentiful in the humid spring and summer months.

- **Is the vehicle driven often at night?**

Night time driving may increase a vehicle's susceptibility to insect impact.

- **Is the vehicle dirty?**

Insect splattering should not present a problem, if they are cleaned off soon after exposure.

Similar Incidents

Acid Rain Etch

Acid rain spots will appear to have etched the paint leaving craters that can be felt with a fingernail. Acid rain usually occurs only on horizontal surfaces. Refer to "Environmental: Acid Rain Etch".

Bird Droppings

Bird droppings appear usually as isolated spots generally on the horizontal surfaces. Refer to "Environmental: Bird Droppings".

Chemical Contamination

A chemical spill can range from small spots to a large affected area. Chemical contamination can appear on various parts of the vehicle. Refer to "Environmental: Chemical Contamination".

Tree Sap Spots

Tree sap spots appear more grouped, and mostly on the horizontal surfaces. Refer to "Environmental: Tree Sap Spots".

Recommended Explanation to Customer

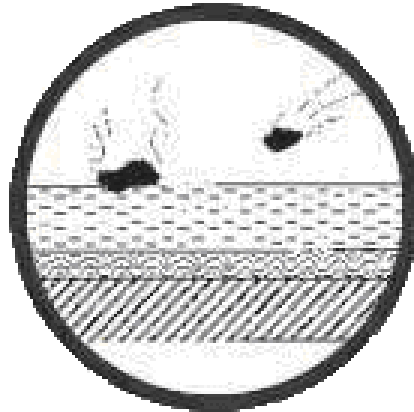
- If insect remainders stay too long on the paint surface, paint damage may occur
- Can be prevented by regular car washing/polishing with finish wax

Environmental: Iron Particles

Incident Description

Iron particles look like tiny orange (rust) or black coloured dots or stains on the paint surface. This incident is most noticeable on white or light colour vehicles. Iron particles may originate from metal processors, scrap yards and railroads. Vehicles transported by train may exhibit "rail dust" which originates from rail car wheel and track contact. The particles settle on the paint, and could become embedded, and oxidize. Iron particles can be felt by lightly running the hand over the paint. The surface will have a rough, gritty feel.

Note: In most cases, iron particles can easily be removed from the paint surface using a clay rub bar along with an acid wash procedure.



Warranty Policy

Iron Particles are not covered under the paint warranty.

Claim Coding

Not Applicable

Vehicle Repair Method

Not Applicable

Diagnosis Questions

- **Is the car parked near metal scrapping yards, foundries or railroad tracks?**

A vehicle's ongoing proximity to industrial manufacturing and railroad traffic is the major cause of iron particles.

- **Is the vehicle new?**

Most vehicles are delivered to dealers with PGF (Paint Guard Film) applied to protect the paint finish. Newer cars are less likely to experience iron particles in the paint.

Similar Incidents

Chemical Contamination

Petroleum spots can sometimes look similar but have a purplish-blue appearance. Refer to "Environmental: Chemical Contamination".

Recommended Explanation to Customer

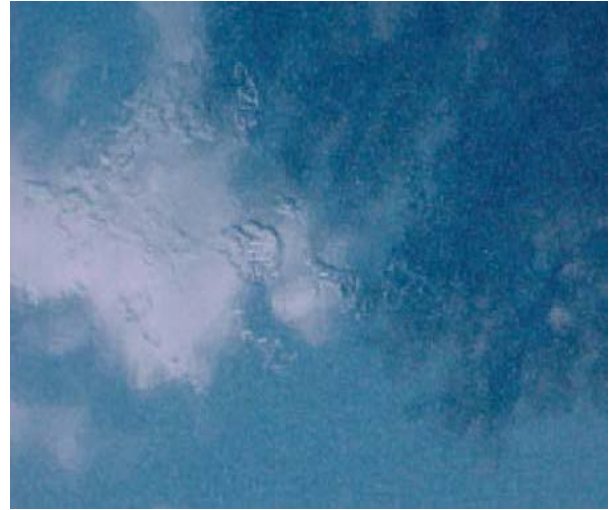
- Iron particles from railway or industrial fall out



Environmental: Tree Sap Spots

Incident Description

Tree sap spots appear as white or discoloured circular blotches about 3 to 13 mm in diameter. Tree sap spots will generally be on horizontal surfaces, and tend to be sticky to the touch. Tree sap spots can etch and discolour the paint, and may cause the paint surface to raise, swell and/or crack. Tree sap spots usually will be found grouped together in one area on the vehicle. Tree sap spots usually occur more often in the spring.



Warranty Policy

Tree Sap Spots are not covered under the paint warranty.

Claim Coding

Not Applicable

Vehicle Repair Method

Not Applicable

Diagnosis Questions

- **Is the vehicle dirty?**

Tree sap generally does not create paint damage if the vehicle is cleaned regularly.

- **Are there similar marks close by on other panels?**

Usually, when tree sap falls onto a vehicle, it will leave spots that are grouped together.

- **Are there any leaves or pine needles in the cowl area?**

Leaves and pine needle debris indicate that the vehicle is parked near trees.

Similar Incidents

Acid Rain Etch

Etch occurs mostly on horizontal surfaces and usually affects several areas. Refer to "Environmental: Acid Rain Etch".

Chemical Contamination

The contaminated area is usually a different colour. Refer to "Environmental: Chemical Contamination".

Bird Droppings

Bird droppings leave larger, individual, more isolated marks on a vehicle. Refer to "Environmental: Bird Drop-pings"

Insect Spots

Insect spots usually appear on the front end or on the leading edges of a vehicle. Refer to "Environmental: Insect Spots".

Recommended Explanation to Customer

- This paint damage is caused by fallout from trees and may cause permanent paint damage when left too long on the paint surface
- Can be prevented by regular car washing/polishing with finish wax

Excessive Sealer

Incident Description

Excessive body panel sealant usually at panel edges.

Warranty Policy

Excessive Sealer is covered under the paint warranty.

Claim Coding

CC: 7

Paint fault =

CS: ZB

CT: 52

Vehicle Repair Method

Colour coat repair (spot repair)

Diagnosis Questions

- None

Similar Incidents

None

Recommended Explanation to Customer

- Not a regular defect in car manufacturing
- Defect will not affect the paint long term durability
- Dependent on size of the defect carry out recommended repair procedure
- If defect is small, recommend customer acceptance as it is

Vehicle Repair Criteria

Repair zone 1 at dealership

Repair zone 2 on customer complaint basis only

Repair to zone 1 and 2 only



Fade: Blackout Panel Fade

Incident Description

Blackout panel fade occasionally occurs only on the panels of the vehicle painted flat black. (E.g. B-pillars, grilles, and trunk lid finishers). The flat black paint may begin to fade in an area and increases with time. Edges of the faded area blend in with the original blackout paint colour.

Warranty Policy

Blackout Panel Fade is covered under the paint warranty.

Claim Coding

CC: 7
Paint fault =
CS: ZB
CT: 13

Vehicle Repair Method

Colour coat repair

Diagnosis Questions

- **Are there signs of previous repair?**

An improper repair can lead to blackout panel fade.

Similar Incidents

Fade

Fade can appear anywhere on vehicle. Refer to "Fade".

Recommended Explanation to Customer

- None

Vehicle Repair Criteria

None



Fade

Incident Description

Fade or severe oxidation is an area of paint that is losing colour and has an appearance that is lighter in colour and/or chalky. There usually are not distinct edges on a fade incident; edges of the affected area blend in with surrounding paint. Sun and age affecting the chemical makeup of the paint can cause fade. Fade is most noticeable on darker colours.

Warranty Policy

Fade is covered under the paint warranty.

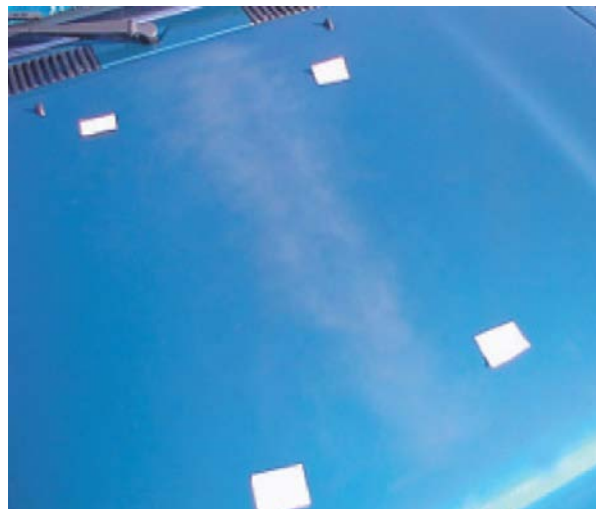
Claim Coding

CC: 7

Paint fault = 028 Fading

CS: ZB

CT: 13



Vehicle Repair Method

Colour coat repair

Diagnosis Questions

- **Are there signs of previous repair?**

Inconsistent colour fade between panels most likely indicates a previous repair

Similar Incidents

Blackout Panel Fade

Blackout panel fade occurs on panel areas that are painted flat black. Refer to "Fade: Blackout Panel Fade".

Loss of Gloss

The paint surface lacks shine and has lost its lustre, but not the colour. Refer to "Loss of Gloss".

Colour Mismatch

Colour mismatch is when adjacent panels have slightly different colouring. Refer to "Colour Mismatch".

Recommended Explanation to Customer

- None

Vehicle Repair Criteria

None

Grin Through

Incident Description

Insufficient base coat on sanded through area.

Warranty Policy

Grin Through is covered under the paint warranty.

Claim Coding

CC: 7

Paint fault = 013 Grin through

CS: ZB

CT: 78

Vehicle Repair Method

Colour code repair (half block) zones 1 and 2

Colour code repair (spot repair) zones 3 and 4

Diagnosis Questions

- None

Similar Incidents

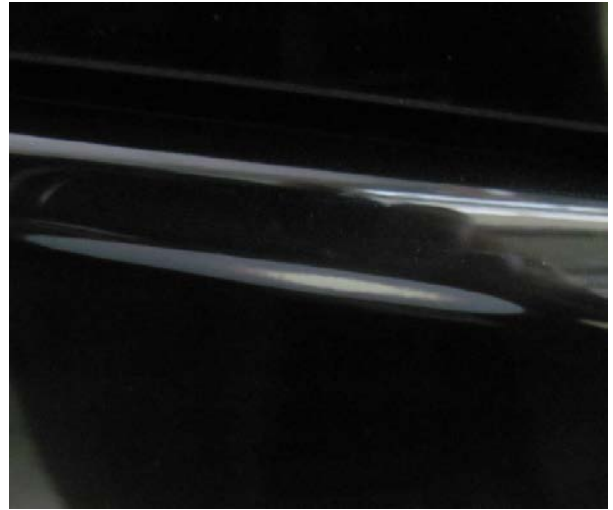
None

Recommended Explanation to Customer

- Not a regular defect in car manufacturing.

Vehicle Repair Criteria

Repair to all zones at dealership (PDI)



Loss of Gloss

Incident Description

Loss of gloss appears as an area of paint that is smooth and is evenly applied, but the paint surface lacks shine and appears dull or flat in comparison with other body panels. Any mirror reflection that still can be seen in the surface is diminished.

Note: In many cases, utilizing compounding and polishing procedures on the vehicle may restore the shine.

Warranty Policy

Loss of Gloss is covered under the paint warranty.

Claim Coding

CC: 7

Paint fault = 028 Fading

CS: ZB

CT: 13

Vehicle Repair Method

Polish and buff repair

Diagnosis Questions

- **Are there signs of a previous repair?**

An improper repair can lead to loss of gloss.

Similar Incidents

Blackout Panel Fade

Limited to areas painted flat black. Refer to "Fade: Blackout Panel Fade".

Fade

Paint loses its colour as well. Refer to "Fade".

Colour Mismatch

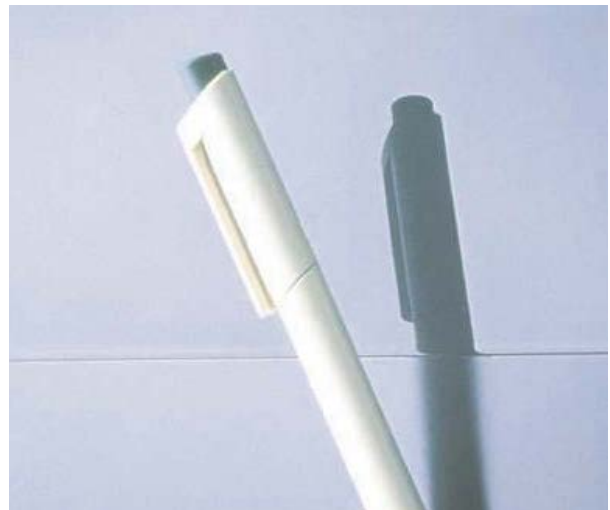
Adjacent body panels may have slightly different colouring. Refer to "Colour Mismatch".

Recommended Explanation to Customer

- None

Vehicle Repair Criteria

None

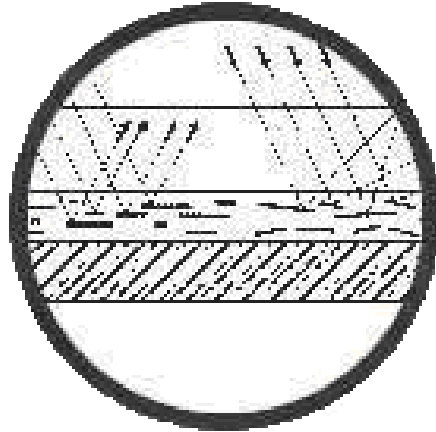


Mottling (Shading)

Incident Description

Mottling appears as a cloudy or sometimes striped effect on an area of the vehicle's paint under certain lighting conditions. Some mottling is a result of variance in paint application of metallic paint (uneven metallic flake dispersion).

Note: Paint should be viewed in bright sunlight, or under halogen lamps or "colour corrected" fluorescent lighting to see the true paint colours. Since all metallic paint exhibits mottling to some degree, only severe cases should be considered for repaint.



Warranty Policy

Mottling is covered under the paint warranty.

Claim Coding

CC: 7

Paint fault = 025 Mottling

CS: ZB

CT: 74

Vehicle Repair Method

Colour coat repair

Diagnosis Questions

- **Has the vehicle been repaired?**

Mottling can be a result of an improper repair.

- **Are the markings visible from most angles?**

Mottling will occur in metallic paint to varying degrees and only the most severe cases should be corrected.

- **Do markings appear in all lighting?**

Some lighting conditions exaggerate the appearance of mottling.

Similar Incidents

None

Recommended Explanation to Customer

- Not a regular defect in car manufacturing.
- Defect will not affect the paint long term durability

Vehicle Repair Criteria

Repair zones 1 and 2 at dealership (PDI)

Repair to zones 1 and 2 only

Assess defect carefully before repair may not be original defect



Orange Peel

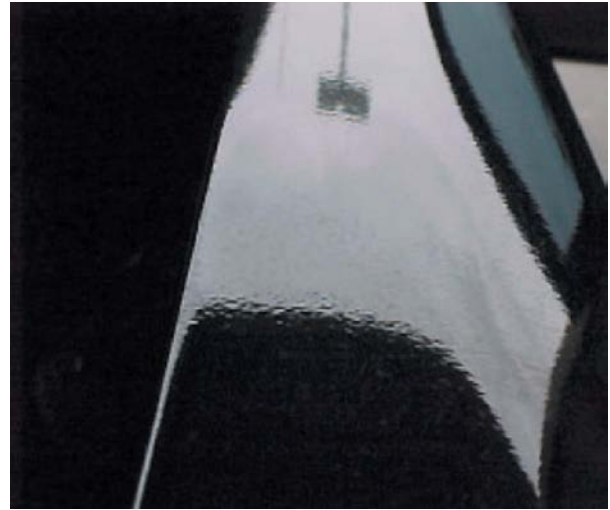
Incident Description

Orange peel is designed into the paint process to help hide minor surface scratches or blemishes. The paint will have a pebbled or granular appearance/texture like the skin of an orange. All paint surfaces have some degree of orange peel. Only severe cases should be considered for a warranty claim.

Note:

- The degree of orange peel varies between horizontal and vertical surfaces; with horizontal surfaces (e.g. hood, roof, and truck) having a smoother surface than the vertical surfaces (e.g. doors, fenders).

- Areas of the vehicle painted with the factory Stone Guard Coating (SGC) should not be confused with an orange peel paint incident. SGC is a thick, flexible paint coating applied to the lower portions of the side doors and rocker panels of many vehicles. This paint coating provides additional protection against stone chips and road debris.



Warranty Policy

If the orange peel is the result of a previous repair then the incident is not covered. Otherwise, **severe cases of orange peel are covered under the paint warranty.**

Claim Coding

CC: 7

Paint fault = 001 Orange peel

CS: ZB

CT: 75

Vehicle Repair Method

Colour coat repair

Diagnosis Questions

- **Has the vehicle been repaired?**

How does the orange peel on adjacent panels compare?

Note: Compare the vehicle incident to other vehicles of the same model and color.

Similar Incidents

None

Recommended Explanation to Customer

- None

Vehicle Repair Criteria

None

Overspray

Incident Description

See picture.

Warranty Policy

Overspray is covered under the paint warranty.

Claim Coding

CC: 7

Paint fault =

CS: ZB

CT: 72

Vehicle Repair Method

Colour coat repair



Diagnosis Questions

None

Similar Incidents

None

Recommended Explanation to Customer

- None

Vehicle Repair Criteria

None

Peeling: Bumper Peeling

Incident Description

The bumper paint will peel/flake off as it loses adhesion with the bumper primer or substrate. Bumper peeling is usually caused by improper preparation of the bumper prior to repainting. The peeling can be either localized (small single area) or in rare cases catastrophic (simultaneous peeling from different bumper areas). The tape test should easily remove the paint.

Notes: Catastrophic peeling can occur if bumper mould release agent/oils are not properly removed prior to bumper painting. Typically bumper peeling is caused by an improper preparation of the bumper prior to painting and will exhibit the following signs:

- Peeling layer has the same colour of the underlying paint colour.
- Sanding marks are visible on the bumper material underneath the peeling layers.

Warranty Policy

Bumper peeling is covered by the paint warranty, unless it is the result of a previous repair or external damage.

Claim Coding

CC: 7

Paint fault = 014 Paint peeling

CS: ZB

CT: 77

Vehicle Repair Method

Colour coat repair

Diagnosis Questions

- **What is the extent of the peeling?**

Catastrophic peeling is more likely to be associated with an improper prior repair.

- **Has the vehicle been repaired or in an accident?**

Improper prior repairs are a common cause of bumper peeling.

Similar Incidents

Bumper Scrapes

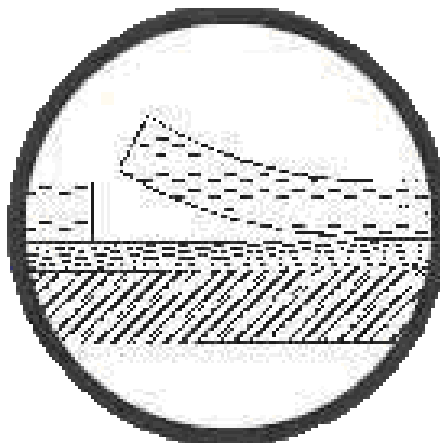
The bumper exhibits linear scrapes and marks where the paint is removed. Refer to "Peeling: Bumper Scrapes".

Recommended Explanation to Customer

- Not a regular defect in car manufacturing

Vehicle Repair Criteria

Repair to all zones



Peeling: Bumper Scrapes

Incident Description

The bumper paint exhibits linear marks or scrapes where some paint is removed. The paint colour from the impacted object may also be present.

Warranty Policy

Bumper Scrapes are covered under the paint warranty.

Claim Coding

Not applicable

Vehicle Repair Method

N/A

Diagnosis Questions

- **Are there any signs of collision damage?**

Check alignment of the panels near the bumper.

- **What colour is the mark?**

Colour that is not vehicle colour, primer colour or bumper colour may be present.

Similar Incidents

Bumper Peeling

Paint is removed with the tape test. Refer to "Peeling: Bumper Peeling".

Recommended Explanation to Customer

- None

Vehicle Repair Criteria

None



Peeling: Clearcoat Peeling

Incident Description

Clearcoat peeling is the peeling of the clear-paint layer from the colourcoat underneath.

Performing the tape test removes no colour, but the clear-coat is removed.

Warranty Policy

Clearcoat Peeling is not covered under the paint warranty if it is a result of an after market repair.

Claim Coding

CC: 7

Paint fault = 014 Paint peeling

CS: ZB

CT: 77

Vehicle Repair Method

Colourcoat

Diagnosis Questions

- **Has the vehicle been repainted?**

Improper repairs are a common cause of clearcoat peeling. Look for peeling near door handles, key cylinders, door edges, antennas and other stress concentration points.

Similar Incidents

Colourcoat Peeling

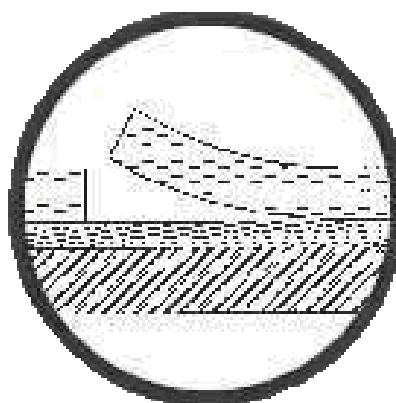
The colourcoat is also peeling. Refer to "Peeling: Clearcoat Peeling".

Recommended Explanation to Customer

- Not a regular defect in car manufacturing

Vehicle Repair Criteria

Repair to all zones



Peeling: Colorcoat Peeling

Incident Description

Colourcoat peeling involves the colourcoat layers of the paint peeling from the vehicle's sheet metal body panels. The peeling can occur anywhere on the vehicle. Paint will likely peel off in small pieces.

Note: Colourcoat peeling is commonly the result of a panel surface not being properly prepared during previous repainting.

Warranty Policy

Colourcoat peeling is covered under the paint warranty, unless it is the result of a previous repair.



Claim Coding

CC: 7

Paint fault = 014 Paint peeling

CS: ZB

CT: 77

Vehicle Repair Method

Colour coat repair

Diagnosis Questions

- **Has the vehicle been repainted?**

Peelings due to an improper repair will usually start at edges of door handles, antennas, lock cylinders and mouldings.

- **Does paint peel with the tape test?**

Loss of adhesion between a layer of paint and its underlying surface can be determined using a tape test. This would be most common on a previously repaired surface.

Similar Incidents

Bumper Peeling

Peeling is limited to bumpers only. Refer to "Peeling: Bumper Peeling".

Clearcoat Peeling

Peeling is limited to only the clearcoat. Refer to "Peeling: Clearcoat Peeling".

Bumper Scrapes

The bumper exhibits linear marks and scrapes where paint is removed. Refer to "Peeling: Bumper Scrapes".

Recommended Explanation to Customer

- None

Vehicle Repair Criteria

None

Peeling: Grille Peeling

Incident Description

Grille peeling involves flakes of paint peeling from the grille surface. Peeling is limited only to the grille. Using the tape test can help identify poor adhesion.

Warranty Policy

If the grille peeling is the result of a previous non-warranty repair, or environmental damage, then the incident is not covered. Otherwise, grille peeling is covered under the paint warranty.

Claim Coding

CC: 7

Paint fault = 014 Paint peeling

CS: ZB

CT: 77



Vehicle Repair Method

Colour coat repair

Diagnosis Questions

- **Has the vehicle been repaired or in an accident?**

Improper paint repairs can cause peeling.

- **Is there peeling present on other panels as well?**

Previous poor collision or paint repairs may also result in peeling on other areas like the hood and bumper

Similar Incidents

Colourcoat Peeling

Peeling can occur anywhere on the vehicle. Refer to "Peeling: Colourcoat Peeling"

Bumper Peeling

Peeling occurs only on the bumper. Refer to "Peeling: Bumper Peeling"

Stone Chips look for evidence of chips on the hood and bumper. Refer to "Chipping: Stone Chips"

Recommended Explanation to Customer

- None

Vehicle Repair Criteria

None

Paint Guards: Paint Guard Film (PGF) Stains

Incident Description

PGF stains can occur if moisture gets trapped under the PGF (Paint Guard Film). The moisture gets absorbed like a sponge into the paint, and may cause a temporary discoloration or a stain. Stains may occur anywhere under the PGF. They will be noticeable immediately after the PGF is removed. The stain appears milky or whitish on dark coloured vehicles and coffee-coloured on light coloured vehicles. It can vary in size from a dime to a clenched fist, have an irregular shape and possibly a slightly raised surface.

Important notes:

Stains in most cases are corrected by the following procedures (These procedures are only effective if performed within a few days/weeks after the PGF is removed):

- Do not buff the paint.
- Place vehicle in sun light for a few hours.
- For more severe cases, apply a heat gun for about 5 minutes.
- PGF film and PGF stains removal is part of the PDI procedures for new vehicles.
- In rare cases, the affected area may have to be repainted.

Warranty Policy

Paint Guards are not covered under the paint warranty.

Claim Coding

Not Applicable

Diagnosis Questions

- **Is the vehicle new?**

This incident can occur on new vehicles where the PGF was applied and is visible immediately after the PGF is removed.

- **Have the recommended service procedures been performed?**

Refer to the procedures above and also the appropriate Technical Service Bulletin for service procedures.

Similar Incidents

Chemical Contamination

Usually found only on older vehicles. Refer to "Environmental: Chemical Contamination".

Recommended Explanation to Customer

- None

Vehicle Repair Method

None

Vehicle Repair Criteria

None



Repair method

Paint Guards: Paint Guard Coat (PGC) Remains

Incident Description

Wax residue remains on the paint surface.

Warranty Policy

Paint Guards are not covered under the paint warranty.

Claim Coding

Not Applicable

Vehicle Repair Method

None

Diagnosis Questions

- None

Similar Incidents

None

Recommended Explanation to Customer

- None

Vehicle Repair Criteria

None



Poor Spot Repair

Incident Description

See picture.



Warranty Policy

Poor Spot Repair is covered under the paint warranty only at PDI.

Claim Coding

CC: 7

Paint fault = 016 Poor spot repair

CS: ZB

CT: 78

Vehicle Repair Method

Colour coat repair

Diagnosis Questions

- None

Similar Incidents

None

Recommended Explanation to Customer

- None

Runs & Drips

Incident Description

Paint runs or sags can occur when an excessive amount of paint is applied in a small area. It is a well-defined local thickening of the paint film in the form of a wavy line or shallow, rounded ridges, normally con-fined to sharply sloping or vertical surfaces.

Warranty Policy

Paint runs or sags are covered by the paint warranty, unless they are the result of a previous repair.

Claim Coding

CC: 7

Paint fault = 024 Paint drip

CS: ZB

CT: 72

Vehicle Repair Method

Colour coat repair (spot repair)

Diagnosis Questions

- **Was the vehicle repainted or in an accident?**

Paint runs or sags may be an indication of an improper paint application.

Similar Incidents

None

Recommended Explanation to Customer

- Unless unsightly recommend the customer accepts the vehicle as it is.

Vehicle Repair Criteria

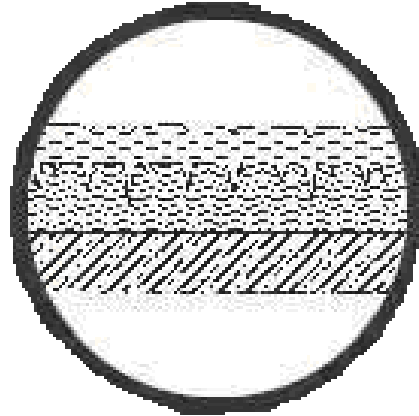
None



Scratches: Sanding Scratches / Marks

Incident Description

Sanding scratches are surface scratches under the paint film. Abrasive paper used to sand the metal surface or primer was too coarse, leading to scratches and score marks which show through the topcoat. The sanding scratches may appear as straight lines (the result of hand sanding), or circular lines (the result of orbital or machine sanding).



Warranty Policy

Sanding scratches are covered by the paint warranty unless they are the result of a previous repair.

Claim Coding

CC: 7

Paint fault = 015 Sanding Scars

CS: ZB

CT: 78

Vehicle Repair Method

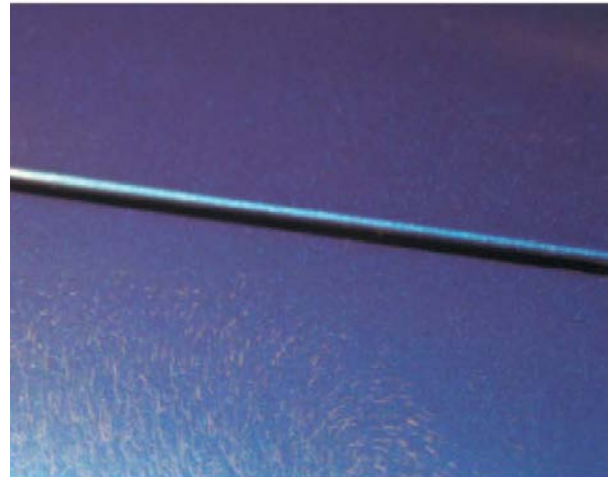
Polish and buff repair

Colour coat repair (spot repair)

Diagnosis Questions

- Was the vehicle repainted or in an accident?

Sanding scratches are usually caused by an improper finish-sanding procedure prior to repainting.



Similar Incidents

None

Recommended Explanation To

Customer

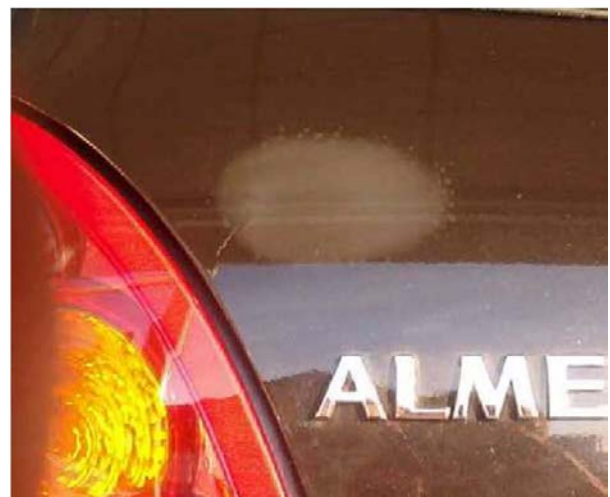
- Not a regular defect in car manufacturing
- Defect will not affect the paint long term durability
- Problem is easily rectified and is not a major repair

Vehicle Repair Criteria

Repair zone 1 at dealership (PDI)

Repair zone 2 on customer complaint basis only

Repair to zones 1 and 2 only



Scratches: Surface Scratches

Incident Description

Surface scratches are multiple tiny grooves in the paint surface usually all going in the same direction. Paint appears rough, or dull, which is caused by something rubbing on the paint. Dirt on the paint surface acts as an abrasive agent increasing the likelihood of scratches.

Warranty Policy

Surface Scratches are not covered under the paint warranty.

Claim Coding

Not Applicable

Vehicle Repair Method

N/A

Diagnosis Questions

- **Is the vehicle dirty?**

Dirt increases the chance of surface scratches occurring.

- **Was a bumper bra used?**

Look for scuffing in an area about one foot from the edge of the hood. Paint discoloration on the front part of the hood and bumper may also be noticeable. A poor fitting bumper bra left on for an extended period of time can cause scratches.

Similar Incidents

Fade

No scratch lines are visible, just a decrease in colour. Refer to "Fade".

Recommended Explanation to Customer

None

Vehicle Repair Criteria

None



Stand Up

Incident Description

Metal particles are protruding into the clear-coat (dry basecoat application). This causes a dull appearance.

Warranty Policy

Stand Up is covered under the paint warranty.

Claim Coding

CC: 7

Paint fault = 009 Stand up

CS: ZB

CT: 75



Vehicle Repair Method

Polish and buff repair

Diagnosis Questions

- None

Similar Incidents

None

Recommended Explanation to Customer

- Not a regular defect in car manufacturing
- Defect will not affect the paint long term durability
- Problem is easily rectified and is not a major repair
- If defect is small, recommend customer acceptance as it is

Vehicle Repair Criteria

Repair zone 1 at dealership (PDI)

Repair zone 2 on customer complaint basis only

Repair to zones 1 and 2 only

Thin Paint

Incident Description

Thin paint is evidenced by the underlying metal or primer paint surfaces showing visibly through the paint film. It occurs most frequently in hard to spray areas, on lower panels, or on sharp edges or contours.

Warranty Policy

Thin paint is covered by the paint warranty, unless it is the result of excessive buffing, or a previous repair

Claim Coding

CC: 7

Paint fault = 007 Thin paint

CS: ZB

CT: 73

Vehicle Repair Method

Colour coat repair (spot repair)

Diagnosis Questions

- **Has the vehicle been repaired?**

Thin paint can be a result of an improper repair.

- **Is there evidence of excessive buffing?**

Check for circular or swirl marks as a result of excessive buffing. Excessive buffing can remove paint over time, which will slightly reduce the paint thickness.

Similar Incidents

Fade

Paint thickness is normal, however there is a loss of colour. Refer to "Fade".

Recommended Explanation to Customer

- Not a regular defect in car manufacturing
- Depending on the severity and location of the defect, advise customer to accept as it is as this will not affect the paint long term durability
- Problem is easily rectified and is not a major repair

Vehicle Repair Criteria

Repair zones 1 and 2 at dealership (PDI)

Repair all other zones on customer complaint basis only



Touch Marks

Incident Description

Wet paint film touched.

Warranty Policy

Touch Marks are covered under the paint warranty.

Claim Coding

CC: 7

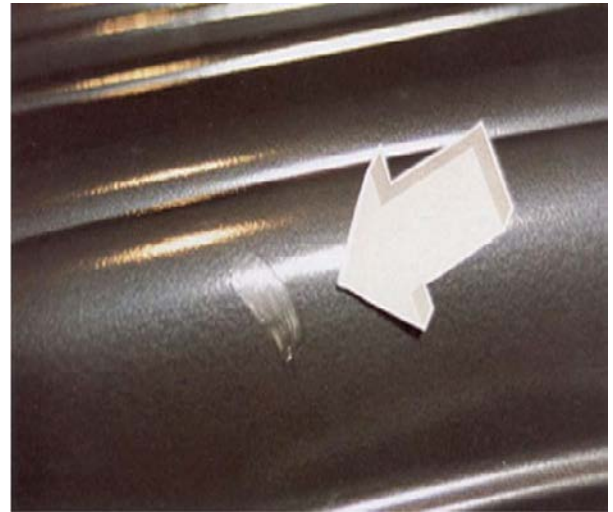
Paint fault = 012 Touch mark

CS: ZB

CT: 11

Vehicle Repair Method

Colour coat repair



Diagnosis Questions

- None

Similar Incidents

None

Recommended Explanation to Customer

- Not a regular defect in car manufacturing

Vehicle Repair Criteria

Repair zone 1 and 2 at dealership (PDI)

Repair all other zones on customer complaint basis only