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Spotting	Stains of random size and distribution usually caused by poor rinsing after chromate conversion process. Also called Chromate Stains.
Tooling Mark	Marks/impressions due to tooling edges.

Anodizing will produce rack marks, which are acceptable if they are within drawing requirements.

Note: Slight discoloration is allowed for anodizing and conversion coating surfaces.

Defect	Description
Abrasion/Scuff	Linear marks on the
Bleeding	Undesired movement of certain materials in a plastic (e.g., plasticizers in vinyl) to the surface of the finished article or into an adjacent material. Also -shot molding processes.

Table 4. Defect Types for Plastic Molded Parts

Blush/Bloom



Defect	Description
Crack/crazing	Separation of material through the entire piece, usually at a folded corner.
Delamination	Separation (peeling) of layers of plastic.
Discoloration	Any color, shading, or significant texture difference. Includes stains.
Drag Mark	Clusters of scratches from plastic dragging against mold details when a part travels through or is ejected from a mold.
Flash	Excess molding material usually found around edges cutouts & parting lines.
Flow Mark	Wavy surface appearance of an object molded from thermoplastic resins or metal caused by improper flow of the mold material into the mold.
Flow/Knit/Weld Line	A mark on a molded piece made by the meeting of 2 flow fronts during the molding process.
Gate	Molten plastic or metal, which connects the runner with the die cavity.
Glassing	When glass or other filler is seen on the surface of the part.
Gloss	Gloss is not consistent from surface to surface or within the same surface or does not match the approved observational standard as specified on the drawing.
Haze	Cloudiness on an otherwise transparent part.
Knockout Pin Mark	An unusual mark left on the part by an ejector pin, which is a device that pushes the part from the mold.
Marbling/Streaking	Colored streaks caused by an incomplete mixing of 2 different colored plastics.
Orange Peel	Rippled or mottled appearance viewable as concentric lines. Caused by under-pressurizing. Orange peel is often the first sign of possible sink or shorting.
Parting Line	A mark left on a part where the die halves meet.
Pinhole/Pit	Small craters on the surface.
Place Out	A build-up of fire retardant on the mold surface which causes the surface of the part to become excessively glossy over the area.
Poor Gate Removal	Improper or uneven removal of material at gate location.

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6.1 Surveillance Product Surfaces







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See Section 9.2 and 9.5 for Surveillance specifications.

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7.0 PROCEDURE VISUAL INSPECTION FOR RECEIVING, IN-PROCESS & FINAL

Rejection of parts shall be based on visual inspection adhering to the following practices:

7.1 Inspection Sites

Should be reasonably clean and free of unnecessary visual distractions.

7.2

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				No Exposed Substrate	
SPOTTING	None allowed	No exposed substrate	No exposed substrate	No Exposed Substrate	No exposed substrate
TOOLING MARK ⁽³⁾	None allowed	None allowed	(Note)	(Note)	(Note)

⁽²⁾ Does not apply to discoloration due to brake marks and tool marks on anodized surfaces. Acceptable as long as there is no bare substrate.

⁽²⁾ For conversion coatings, clear/colorless, iridescent yellow, brown, gray, or blue tints are allowed.

⁽²⁾ For anodizing, slight discoloration from dripping or rundown of the sealing solution from designed crevices in a component shall be allowed.

⁽³⁾ Acceptable as long as there is no bare substrate (marks are still coated), marks are not sharp -of-

be out-of-print.

⁽⁴⁾ All scratches shall receive the rework or repair per ACSS Manufacturing Spec M2597539

9.6 Standard for Plastic Molded Parts

- All quantity of defects shall be evaluated over a 25 sq. in. area for Class B, C, & D surfaces.
- Class A defects shall be evaluated over entire surface, regardless of size.

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Scratch	None allowed			No exposed substrate
Stray Spot	None allowed			Acceptable
Variable Line Width	<10% of total line width	<10% of total line width	<25% of total line width	Acceptable

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10.0 ATTACHMENTS (VISUAL AIDS)

See Table 13 through Table 17.

Note: Image quality is best when electronic copy is used.

Table 13. Visual Aides for Specific Defects in Paint



Image credits: modeltech, BuyersAsk, hmgpaint, BYK Instruments, Glasurit

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