

# **MRQ52620 CHANGE LOG (REV0 TO REV A)**

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<b>Section</b>	<b>Impact</b>	<b>Is</b>	<b>Was</b>
Title Page	Minor	Removed	Limited Rights Legend (DFARS 252.227-7013 paragraph (a)(13))
Table of Contents	Minor	Added List of Figures	N/A
Table of Contents	Minor	Added List of Tables	N/A
Table of Contents	Minor	Expanded List of Appendices to include subsections	Table of Appendices
2.1	Minor	This document will assist in the judgment of whether a machined metallic part for Moog Aircraft Group orders conforms to the drawing and relevant specifications.	This document [...] Moog Aircraft Group orders is deemed Non-Conforming.
2.1	Major	The primary intent of this document is to align suppliers and Moog to the criteria and methods for judging whether parts conform to the drawing and relevant specifications. It is therefore expected that both suppliers' and Moog's Quality Engineers, Product Engineers, and Receiving Inspection will use this document as the basis for process optimization, control plans, inspection plans, and identification of non-conforming parts with visual irregularities. Note, per Section 2.2.5, Moog and its customers maintain sole MRB (Material Review Board) authority when dispositioning parts that have been deemed non-conforming.	The primary intent of this document is to align suppliers and Moog as to criteria and methods for judging whether parts are non-conforming. It is therefore expected that both suppliers' and Moog Quality & Product Engineers will use this document as the basis for process optimization, control plans, inspection plans, and accept/reject criteria when dispositioning parts with visual irregularities.
2.2.2	Minor	Unless otherwise specified, applicable dimensions [...].	Applicable dimensions [...].
2.2.3	Major	Parts shall be free from FOD larger than 25 microns (approximately .001 inches, viewable at 3.5x magnification) measured along the largest linear dimension, as measured per AS598 or ISO 4407.  Suppliers shall adopt FOD control and inspection methods to ensure this requirement and the requirements of AS9146. FOD which is isolated [...].	Moog requires that all parts are free from FOD and contamination at 10x magnification. Suppliers shall adopt FOD control and inspection methods to assure this requirement, and the requirements of AS9146. FOD which is isolated [...].
2.2.4	Minor	<b>Part Handling, Packing, and Preservation</b> Packing shall be adequate to protect the components during transportation, handling, and storage at all stages and shall include provisions [...].	<b>Part Handling, Packing, &amp; Preservation:</b> Packaging shall be [...] and storage at all stages including provisions [...].

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Section	Impact	Is	Was
2.2.5	Major	<b>MRB Authority and Rework</b> [...] Where doubt exists over the interpretation of an irregularity, including whether rework-to-print is allowable, it shall be considered non-conforming and additional advice shall be sought from Moog engineering via an SR-type NC (SRID). Whenever an irregularity is caused by an event that may cause an over-stress condition [...] it shall be considered non-conforming and advice shall be sought from Moog engineering via an SR-type NC (SRID).	<b>MRB Authority &amp; Rework:</b> [...] Where doubt exists over the interpretation of an irregularity, including whether rework-to-print is allowable, it should be considered non-conforming and additional advice sought from Moog engineering via an SR-type NC (SRID). Whenever an irregularity is caused by an event that may cause an over-stress condition [...] it shall be considered non-conforming and advice sought from Moog engineering via an SR-type NC (SRID).
2.3	Minor	[...] (e.g. based on criticality of parts or tolerances specified on the drawing), [...].	[...] (based on criticality of parts or tolerances specified on the drawing for example), [...].
3.	Minor	Alphabetized list of definitions	N/A
3.	Major	Edge Break – The condition at the intersection of two or more machined features (external or internal) achieved either by application of manual, chemical, or machined operations. Unless otherwise specified, the range of allowable Edge Break condition is specified in the title block of the drawing. E.g. “.002 Max Edge Break”.	N/A
3.	Minor	Shall - Shall denotes an intended mandatory requirement.	Shall denotes an intended mandatory requirement. Each shall hereafter requires a verification process. Each use of the term shall is listed in the verification matrix. Where not already indication in the matrix, the supplier is required to state how the requirement of each shall is to be verified.
3.	Major	Sharp Edge – The intersection of two or more machined features (external or internal) requiring no Edge Break greater than a specified value or by a size variance over feature length. The intent is to preclude application of manual, chemical, or machined Edge Breaks beyond the minimum required to remove hanging burrs. Unless otherwise specified, the maximum allowable Edge Break for a Sharp Edge is .0010 inches. E.g. “Size variance over feature length to be .0005 max per hole.”	N/A

<b>Section</b>	<b>Impact</b>	<b>Is</b>	<b>Was</b>
3.	Minor	Will - Will denotes an intended mandatory requirement. It is synonymous with shall.	Will denotes an intended mandatory requirement. It is synonymous with shall, but does not require verification.
4.	Minor	Alphabetized list of abbreviations	N/A
4.	Major	FO – Foreign Object – Any substance, debris, or article alien to a part or system that could potentially enter the product or system and cause damage or affect function.	N/A
4.	Major	FOD – Foreign Object Damage – Any damage caused by FOD that could affect the part's or system's performance or safety.	FOD – Foreign Object Debris/Damage – Any substance, debris, or article alien to a part or system which could potentially cause damage or improper function. The acronym FOD is used to describe both the foreign objects themselves, and any foreign object damage attributed to them.
4.	Major	FOD – Foreign Object Debris – Any FO that has entered the part or system and could result in FOD.	N/A
4.	Minor	RI – Receiving Inspection	N/A
5.	Minor	Alphabetized list of referenced documents. Separated line items that were listed together.	N/A
5.	Minor	Added various specifications	N/A
5.	Minor	AMS-C-8837 – Cadmium Coating (Vacuum Deposited)	AMS-C-8837 – Cadmium coating
5.	Minor	AMS-QQ-P-416 – Cadmium Plating (Electrodeposited)	AMS-QQ-P-416 – Cadmium plating
5.	Minor	AS 598 – Aerospace Microscopic Sizing and Counting of Particulate Contamination for Fluid Power Systems	N/A
5.	Minor	ASME Y14.5-2009 – Dimensioning and Tolerancing	ASME Y14.5-2009 – Dimensioning & Tolerancing
5.	Minor	ISO 4407 – Hydraulic Fluid Power – Fluid Contamination – Determination of Particulate Contamination by the Counting Method Using an Optical Microscope	N/A
5.	Minor	MIL-A-8625 – Anodic Coatings for Aluminum and Aluminum Alloys	MIL-A-8625 – Anodizing.
5.	Minor	MIL-DTL-5541 – Chemical Conversion Coatings on Aluminum and Aluminum Alloys	MIL-DTL-5541 – Chemical conversions and coatings.
5.	Minor	MIL-DTL-83488 – High Purity Aluminum Coating	MIL-DTL-83488 – Aluminum Coatings.
A1.	Minor	A1. Scope This appendix defines what constitutes a non-conformance against Moog requirements [...].	1.0 Surface Corrosion and Pitting This appendix defines what constitutes a non-conformance or otherwise against Moog requirements [...].
A2.	Minor	Alphabetized list of definitions	N/A

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Section	Impact	Is	Was
A2	Minor	Pitting – [...] Pits, wide or narrow, deep or shallow (with many shapes) usually are covered with corrosion by-products that hide the hole.	[...] Pits, wide or narrow, deep or shallow (with many shapes) usually are covered with corrosion by-products that hide the hole. More resistance materials with Chromium, Molybdenum or Nickel or polished surfaces or environmental control can reduce and even prevent pitting.
A3.1	Minor	Added new §A3.1  A3.1 Effect of Corrosion and Pitting Pitting and corrosion are Non-Conforming because they result in weakened material properties for both wear and fatigue. Materials with rough surfaces or with low amounts of Chromium, Molybdenum and Nickel are more susceptible to corrosion.	A3.0 Background Pitting corrosion results in weakened material properties for both wear and fatigue, therefore such conditions are Non-Conforming. Materials with low amounts of Chrome, Molybdenum and Nickel with rougher surfaces are more susceptible.
A3.2	Minor	A3.2 Detection Method [...] Corrosion of steels is usually due to free iron from an improperly controlled process, resulting in spots (freckles) on the surface of the part with rings around them and a pit in the middle. The spot color [...].	A3.1.1 Visual Inspection [...]. Corrosion of steels is usually due to free iron from an improperly controlled process where spots (freckles) exist on the surface with rings around them and a pit in the middle. For steel, the spot color [...].
A3.2 (old)	Minor	Removed	3.2 Definition of Part-to-Print and Non-Conforming Refer to Section 3.0 of the main body for definitions on Part-to-Print and Non-Conforming
A4.	Minor	A4. Part-to-Print Decision for Surface Corrosion and Pitting	4.0 Pitting Corrosion
A4.1	Major	A4.1 Criteria [Added Table A-1 explicitly listing part-to-print decisions for surface corrosion based on information from “Flow Chart (for Surface Corrosion on Steel Parts)”	N/A
A4.2	Minor	A4.2 Examples [Figure A.1] <ul style="list-style-type: none"> <li>Per Table A-1, pitting corrosion constitutes a Non-Conformance.</li> </ul> [Figure A.2] <ul style="list-style-type: none"> <li>Per Table A-1, pitting corrosion constitutes a Non-Conformance.</li> </ul>	4.1 Examples [Figure A1] <ul style="list-style-type: none"> <li>Per paragraph 3.1.1 above pitting corrosion constitutes a Non-Conformance.</li> </ul> [Figure A2] <ul style="list-style-type: none"> <li>Per paragraph 3.1.1 above pitting corrosion constitutes a Non-Conformance.</li> </ul>

<b>Section</b>	<b>Impact</b>	<b>Is</b>	<b>Was</b>
A4.3	Major	A4.3 Flow Chart (for Surface Corrosion on Steel Parts) The following flowchart provides an alternate representation of criteria in Section A4.1 and is for reference only. Should the information shown differ from Section A4.1, the Part-to-Print Decisions shown in Table A-1 shall take precedence.	Flow Chart (for Surface Corrosion on Steel Parts)
B1.	Minor	B1. Scope This appendix defines what constitutes a non-conformance against Moog requirements regarding cosmetic irregularities. In all cases, reference must be made to the order of precedence laid out in Section 2.1 of the main body of this document and repeated here: [...].	1.0 Introduction This appendix defines what constitutes a non-conformance or otherwise against Moog requirements in the area of cosmetic irregularities. In all cases, reference must be made to the order of precedence laid out in Section 2.1 of the main body of the document and repeated here: [...].
B2.	Minor	Alphabetized list of definitions	N/A
B3.1	Minor	B3.1 Detection of Irregularities	3.1 Detection Method
B3.1.1	Minor	Plastic picks shall be used for tactile detection of irregularities. An example of a plastic pick is shown in Figure B.1. Specific manufacturers and dimensions are not defined in this standard, but shall be suitable for the type of parts and features being inspected. Other tools or picks of any other material are not suitable and shall not be used.	NOTE: The precise manufacturer and dimensions of the plastic pick are not explicitly defined in this standard, but should be suitable for the type of parts and features being inspected. However, the use of a plastic pick for tactile detection is a requirement. Other tools or picks of any other material are not suitable and should not be used.
B3.1.2	Minor	B3.1.2 Visual Detection	3.1.1 Visual Detection
B3.2	Major	B3.2 Measurement of Irregularities It may be necessary to measure the depth of an irregularity to determine whether the part is conforming to the GD&T requirements on the drawing. When this is necessary, a surface roughness tester or profilometer can be used to provide a trace of the surface profile of a part. Most surface roughness testers will provide a Roughness Average (Ra) and Total Profile Height (Rt) value with the trace. Figure B.2 shows an example of a typical profilometer report.  [Table B-1 and relevant information moved to Section B4.1.]  [Table B-2 and relevant information removed.]	3.1.2 Measuring the Depth of Irregularities It may be necessary to measure the depth of an irregularity to determine whether the part is conforming to the GD&T requirements on the drawing. This section defines the method for using Roughness Average requirements to define the allowable limits for the depth of an irregularity.  A surface roughness tester or profilometer can be used to provide a trace of the surface profile of a part. Most surface roughness testers will provide a Roughness Average (Ra) and Total Profile Height (Rt) value with the trace.
B4.	Minor	B4. Part-to-Print Decision for Cosmetic Irregularities	4.0 Cosmetic Irregularities

Section	Impact	Is	Was
B4.1	Minor	<p>B4.1 Criteria Table B-1 below shows the maximum allowable Total Profile Height (Rt) for irregularities on surfaces for typical Roughness Average requirements.</p> <p>Table B-1</p> <p>Note: Even if [...] the above requirements.</p> <p>Note: Machining steps/mismatch [...] such features.</p>	<p>[Section 3.1.2] [...] Table B1 below shows [...] for typical Roughness Average requirements.</p>
B4.1	Minor	<p>B4.1 Criteria Table B-2 below defines the Part-to-Print decision [...].</p> <p>Table B-2 – Part-to-Print Decision by Irregularity Type</p> <p>*Additional Requirements:</p> <ul style="list-style-type: none"> <li>• Irregularity must not cover [...] and aesthetic requirements flowed down by Moog’s customers.</li> <li>• Irregularities must conform to all GD&amp;T callouts on the drawing. This includes Surface Finish per Table B-1, Flatness, [...].</li> </ul> <p>**Additional Requirements:</p> <ul style="list-style-type: none"> <li>• All rework [...] allowable, it shall be considered non-conforming and additional advice shall be sought [...].</li> <li>• Whenever an irregularity [...] advice shall be sought [...].</li> </ul>	<p>[Section 3.1.2] Table B3 below defines the Part-to-Print decision [...].</p> <p>Table B3 – Part-to-Print Decision by Irregularity Type</p> <p>*Additional Requirements:</p> <ul style="list-style-type: none"> <li>• Irregularity must not cover [...] and aesthetic requirements flowed down by customers.</li> <li>• Irregularities must conform to all GD&amp;T callouts on the drawing. This includes Surface Finish per Table B1 and Table B2, Flatness, [...].</li> </ul> <p>**Additional Requirements:</p> <ul style="list-style-type: none"> <li>• All rework [...] allowable, it should be considered non-conforming and additional advice sought [...].</li> <li>• Whenever an irregularity [...] advice sought [...].</li> </ul>

Section	Impact	Is	Was
B4.2	Minor	<p>B4.2 Examples</p> <p>Figure B.3</p> <ul style="list-style-type: none"> <li>• Table B-2 allows the presence of Smooth irregularities [...].</li> </ul> <p>Figure B.4</p> <ul style="list-style-type: none"> <li>• When a pick is run across [...]. Per Table B-2 irregularities [...].</li> </ul> <p>Figure B.5</p> <ul style="list-style-type: none"> <li>• When a pick is run across [...]. Per Table B-2 irregularities [...].</li> </ul> <p>Figure B.6</p> <ul style="list-style-type: none"> <li>• When a pick is run across [...]. Per Table B-2 irregularities [...].</li> </ul>	<p>4.1.2 Examples</p> <p>Figure B3</p> <ul style="list-style-type: none"> <li>• Table B3 allows the presence of Smooth irregularities [...].</li> </ul> <p>Figure B4</p> <ul style="list-style-type: none"> <li>• When a pick is run across [...]. Per Table B3 irregularities [...].</li> </ul> <p>Figure B5</p> <ul style="list-style-type: none"> <li>• When a pick is run across [...]. Per Table B3 irregularities [...].</li> </ul> <p>Figure B6</p> <ul style="list-style-type: none"> <li>• When a pick is run across [...]. Per Table B3 irregularities [...].</li> </ul>
B4.3	Major	<p>B4.3 Flow Chart (for Cosmetic Irregularities)</p> <p>Added preliminary decision step, "Is irregularity on a critical surface?" If yes, move directly to "Preliminary decision: Part Non-Conforming". If no, continues to remaining flow chart as before.</p>	<p>[Section 4.1.2] N/A</p>



<b>Section</b>	<b>Impact</b>	<b>Is</b>	<b>Was</b>
B3.1.2 (old)	Major	Removed	<p>Table B2 below shows the maximum allowable Total Profile Height (Rt) for regular machined surfaces (i.e. free of irregularities) with typical Roughness Average requirements.</p> <p>Table B2 – Maximum Allowable Machining Mark Depths for Different Surface Finish Requirements</p> <p>In summary: A surface with an irregularity must:</p> <ul style="list-style-type: none"> <li>• Have a Roughness Average (Ra) that is equal to or less than the requirement on the drawing AND</li> <li>• Have a Total Profile Height (Rt) that is equal to or less than the limits defined in Table B1 above when the profile of the surface in the area of the irregularity is evaluated</li> </ul> <p>A surface with no visible irregularities at 1X must:</p> <ul style="list-style-type: none"> <li>• Have a Roughness Average (Ra) that is equal to or less than the requirement on the drawing AND</li> <li>• Have a Total Profile Height (Rt) that is equal to or less than the limits defined in Table B2. </li></ul>
C1.	Minor	C1. Scope This appendix communicates general knowledge of burr removal and defines Moog's criteria for inspecting and deburring edge breaks, cross holes, wire-ways, intersecting passages, threads, and profiles. In all cases, [...]	1.0 Introduction This appendix defines Moog's deburr criteria for the inspecting and deburring edge breaks, cross holes, wire-ways, intersecting passages, threads, profiles, and general knowledge of burr removal. In all cases, [...]
C3.	Minor	[...] burrs that are visible at 10X magnification are considered non-conforming per the criteria of Section C4.1.	[...] burrs that are visible at 10X magnification are considered non-conforming.
C3.1	Clerical	Part cleanliness – Cleanliness may be essential for efficiently detecting burrs. Burrs may be overlooked if confused with dirt or other contaminants.	Part cleanliness – Cleanliness may be essential for efficiently detecting burrs. Confused with dirt or other contaminants, burrs may be overlooked.
C3.1	Clerical	Backlighting – [...] with the use of front lighting from a microscope alone.	Backlighting – [...] with the use of front lighting from just a microscope alone.

Section	Impact	Is	Was
C3.2	Minor	C3.2 Inspection Aids Microscope, eye loupe, [...] detecting burrs. A magnification power of 10x is ideal for detecting and removing burrs. Higher magnification can be used if desired for removing burrs. The equipment shown in Figure C.5 through Figure C.10 are not required but are recommended for the inspection and removal of burrs.	3.2 Visual Detection Inspection Aids – Microscope, eye loupe, [...] detecting burrs. A magnification power of 10x are ideal for detecting and removing burrs. Higher magnification can be used if desired for removing burrs. The following examples are not a requirement but are recommended for the use of inspection and burr removal.
C3.2	Minor	Fixed spacing to show caption of Figure C.5	Figure C5 caption hidden by Figure C6
C4.	Minor	C4. Part-to-Print Decision for Burrs	N/A
C4.1	Major	C4.1 Criteria Burrs that are tactile or are visible at 10X or less magnification are considered non-conforming.	N/A
C4.2	Minor	C4.2 Flow Holes	4.0 Flow Holes
C4.2.1	Minor	C4.2.1 Feature Description The features shown in Figure C.11 are hydraulic passages. Burr free conditions are required on these areas. Edge break requirements are to drawing specifications. Depending on the material, [...].	4.1 Feature Description These features are hydraulic passages. Burr free conditions are required on these areas. Edge break requirements are to drawing specifications. Dependent upon the material, [...].
C4.2.2	Minor	C4.2.2 Examples	4.2 Examples
C4.3	Minor	C4.3 Scalloped Recesses	5.0 Scalloped Recesses
C4.3.1	Minor	C4.3.1 Feature Description	5.1 Feature Description
C4.3.2	Minor	C4.3.2 Examples	5.2 Examples
C4.3.2	Minor	Figure C.17 <ul style="list-style-type: none"> <li>Sharp edges that do not meet minimum edge break requirement on drawing.</li> </ul>	Figure C17 <ul style="list-style-type: none"> <li>Sharp edges</li> </ul>
C4.3.2	Minor	Figure C.18 <ul style="list-style-type: none"> <li>No burrs present on feature at 10X magnification</li> </ul>	Figure C18 <ul style="list-style-type: none"> <li>No burrs present on feature</li> </ul>
C4.4	Minor	C4.4 Intersecting Passages	6.0 Intersecting Passages
C4.4.1	Major	C4.4.1 Feature Description Intersecting passages form essential flow paths [...] and passages should be free of chips and burrs.  For intersecting passages, a drawing may explicitly allow for mismatch or the drawing tolerance may result in a mismatch at the intersection. In these cases, the intersection shall be free from burrs and shall meet the edge break requirements of the drawing. In all cases, the part shall meet all size and position requirements as called out on the drawing.	6.1 Feature Description Form essential flow paths [...] and passages should be free of chips and burrs.

<b>Section</b>	<b>Impact</b>	<b>Is</b>	<b>Was</b>
C4.4.2	Major	C4.4.2 Examples Added Figure C.21 (Intersecting Flow Passages, Non-Conforming) and reason for non-conformance.  Added Figure C.22 (Mismatch at Intersecting Flow Passages, Part-to-Print) and reasons for conformance.	6.2 Examples N/A
C4.5	Minor	C4.5 Internal and External Threads	7.0 Internal and External Threads
C4.5.1	Minor	C4.5.1 Feature Description Threads are high stress areas [...].  Figure C.23	7.1 Feature Description These features are high stress areas [...].  Figure C21
C4.5.2	Minor	C4.5.2 Examples Figure C.24  Figure C.25	7.2 Examples Figure C22  Figure C23
C4.6	Minor	C4.6 Blind Tapped Holes	8.0 Blind Tapped Holes
C4.6.1	Minor	C4.6.1 Feature Description Blind tapped holes are generally low stress areas. Be sure to remove any FOD such as [...]. Deburr the first thread and make sure the last thread [...].  Figure C.26	8.1 Feature Description Generally low stress areas. Be sure to remove any FOD such as [...]. Deburr the first thread and make sure last thread [...].  Figure C24
C4.6.2	Minor	C4.6.2 Examples Figure C.27  Figure C.28 – Examples of Part-to-Print and Non-Conforming in blind threaded bores – FOD [Figure C.28 text box] Threaded hole with FOD  Figure C.29	8.2 Examples Figure C25  Figure C26 – Examples of Part-to-Print and Non-Conforming in blind threaded bored – FOD [Figure C26 text box] Threaded hole with FOD  Figure C27
C4.7	Minor	C4.7 Splines and Serrations	9.0 Splines and Serrations
C4.7.1	Minor	C4.7.1 Feature Description Splines consist of ridges or teeth [...]. Burrs are usually large on one side of the spline. [...].  Figure C.30	9.1 Feature Description Ridges or teeth [...]. Burrs are usually large on one side of spline. [...].  Figure C28
C4.7.2	Minor	C4.7.2 Examples Figure C.31	9.2 Examples Figure C29
C4.8	Minor	C4.8 Wireways	10.0 Wireways
C4.8.1	Minor	C4.8.1 Feature Description Wireways are generally [...].	10.1 Feature Description These features are generally [...].

<b>Section</b>	<b>Impact</b>	<b>Is</b>	<b>Was</b>
C4.8.2	Minor	<p>C4.8.2 Examples Figure C.32</p> <ul style="list-style-type: none"> <li>The wireway has been deburred but the edge is still sharp. Does not meet minimum edge break requirement on drawing.</li> </ul> <p>Figure C.33 – Wireway, Part-to-Print</p> <ul style="list-style-type: none"> <li>No burr present at 10X magnification</li> </ul> <p>Figure C.34 – Wireways, Part-to-Print</p> <ul style="list-style-type: none"> <li>No burr present at 10X magnification</li> </ul>	<p>10.2 Examples Figure C30</p> <ul style="list-style-type: none"> <li>The wireway has been deburred but the edge is still sharp.</li> </ul> <p>Figure C31 – Part-to-Print</p> <p>Figure C32 – Part-to-Print</p>
C4.9	Minor	C4.9 Tie Wire Holes	11.0 Tie Wire Holes
C4.9.1	Minor	C4.9.1 Feature Description Tie wire holes are [...].	11.1 Feature Description These features are [...].
C4.9.2	Minor	<p>C4.9.2 Examples Figure C.35 – Before and after deburr of tie wire hole</p> <p>Figure C.36 – Before and after deburr of tie wire hole</p>	<p>[Section 11.1] Figure C33 – Before and after deburr of wireway</p> <p>Figure C34 – Before and after deburr of wire way</p>
C4.10	Minor	<p>C4.10 Miscellaneous Feature Pictures Figure C.37 – Miscellaneous Example – Before and After Deburr</p> <p>Figure C.38 – Miscellaneous Example – Before and After Deburr</p> <p>Figure C.39 – Miscellaneous Example – Before and After Deburr [moved to new page to prevent running into page footer]</p>	<p>12.0 Miscellaneous Feature Pictures Figure 35</p> <p>Figure 36</p> <p>Figure 37</p>
D1.	Minor	<p>D1. Scope This appendix defines what constitutes a non-conformance against Moog requirements [...].</p>	<p>1.0 Introduction This appendix defines what constitutes a non-conformance or otherwise against Moog requirements [...].</p>
D2.	Minor	<p>D2. Definitions [Removed]</p> <p>[Removed]</p>	<p>2.0 Definitions Drawing Border Tolerance – The tolerances called out on the drawing border which state “unless otherwise specified...”</p> <p>Edge radius – A corner radius between the junction of 2 surfaces where the material is on the inside of the radius, lying on and external corner</p>

Section	Impact	Is	Was
D3.	Minor	D3. Background Some Moog parts are modelled without fillets despite the fact that there are fillet requirements on the drawing. In these cases, the requirements for fillet size will be provided by unique drawing notes that govern external contouring. This appendix clarifies the intent of the unique external contouring notes to ensure that there is no ambiguity when manufacturing or inspecting these parts.	N/A
D4.	Minor	D4. Part-to-Print Decision for External Contouring	N/A
D4.1	Major	D4.1 Criteria The following requirements are applicable to all fillets and radii created during external part contouring that are governed by a drawing note similar to "Unless otherwise specified, Contour fillets are to be R.250". <ul style="list-style-type: none"> <li>• [Removed]</li> <li>• Fillets [...].</li> <li>• Radii should be tangential to adjacent surfaces or bisect corners [...].</li> </ul>	3.0 External Contouring The following requirements are applicable to all fillets and radii created during external part contouring. These features are typically defined on the drawing with a note similar to "Unless otherwise specified, Contour fillets are to be R.250" or "Unless otherwise specified, Contour fillets are to be R.375". <ul style="list-style-type: none"> <li>• The radii must fall within the criteria established in Section 3.4</li> <li>• Fillets [...].</li> <li>• Radii should be tangential to adjacent surfaces and bisect corners [...].</li> </ul>
D4.2	Minor	D4.2 Examples Figure D.1  Figure D.2  Figure D.3	4.0 Contouring Examples Figure D6  Figure D7  Figure D8
E1.	Minor	E1. Scope This appendix defines what constitutes a non-conformance against Moog requirements [...].  [...]  The acceptability criteria for cosmetic irregularities [...] described in this section.	1.0 Introduction This appendix defines what constitutes a non-conformance or otherwise against Moog requirements [...].  [moved from Section 3.2] The acceptability criteria for cosmetic irregularities [...] described in this section.
E2.	Minor	Alphabetized list of definitions	N/A
E3.1	Minor	E3.1 Effect of Special Process Irregularities	3.0 Background
E3.2	Minor	E3.2 Visual Detection	3.1.1 Visual Detection

Section	Impact	Is	Was
E3.2 (old)	Minor	[Removed]  [moved to Section E1.]	3.2 Definition of Part-to-Print and Non-Conforming Refer to Section 3.0 of the main body for definitions on Part-to-Print and Non-Conforming. The acceptability criteria for cosmetic irregularities outlined in Appendix B of this document are also applicable to parts subjected to the special processes described in this section.
E4.	Minor	E4. Part-to-Print Decision for Special Processes	4.0 Dry Process
E4.1	Clerical	MIL-DTL-83488 (3 places)  MIL-DTL-5541 (2 places)	MIL DTL 83488  MIL-C-5541
E4.1.1	Minor	E4.1.1 Criteria MIL-DTL-5541 (1 place)	4.1.1 Part-to-Print Decision for Jig Marks, Damage and Color Variation MIL-C-5541
E4.1.2	Clerical	MIL-DTL-83488 (4 places)  MIL-DTL-5541 (1 place)	MIL DTL 83488  MIL-C-5541
E4.2	Minor	E4.2 Heat Treatment There are many different [...].	5.0 Heat Treatment 5.1 Background There are many different [...].
E4.2.1	Minor	E4.2.1 Criteria  [Figure E.6] Removed listed temperatures	5.2 Part-to-Print Decision for Heat Tint and Hardness Indentations
E4.2.2	Minor	E4.2.2 Examples	5.3 Examples
E6.0 (old)	Minor	Removed	6.0 Wet Process
E4.3	Minor	E4.3 Anodizing "Except for touch up [...] free from powdery areas, loose films, breaks, scratches, [...]."	6.1 Anodizing "Except for touch up [...] free from powdery areas, loose films, breaks, scratched, [...]."
E4.3.1	Minor	E4.3.1 Criteria	6.1.1 Part-to-Print Decision for Jig Marks and Damage  6.1.2 Part-to-Print Decision for Anodize Runout
E4.3.2	Minor	E4.3.2 Examples	6.1.3 Examples
E4.3.2	Major	[Figure E.11 text box] Chemical Conversion Coat per MIL-DTL-5541, Type II, Class 3	[Figure E11 text box] Chemical Conversion Coat per MIL-DTL-5543, Type II, Class 3
E4.4	Minor	E4.4 DFL (Dry/Solid Film Lubricants) DFL is a material which, [...].	6.2 DFL (Dry/Solid Film Lubricants) 6.2.1 Background DFL is a material which, [...].
E4.4.1	Minor	E4.4.1 Criteria	6.2.2 Part-to-Print Decision for DFL Overspray / Seepage
E4.4.2	Minor	E4.4.2 Examples	6.2.3 Examples
E4.5	Minor	E4.5 Cadmium Coating/Plating This process involves [...].	6.3 Cadmium Coating/Plating 6.3.1 CAD Plating This process involves [...].

<b>Section</b>	<b>Impact</b>	<b>Is</b>	<b>Was</b>
E4.5.1	Minor	E4.5.1 Criteria	6.3.2 Part-to-Print Decision for Jig Marks, Damage and Color Variation  6.3.3 Part-to-Print Decision for Cadmium Plate Runout
E4.5.2	Minor	E4.5.2 Examples	6.3.4 Examples

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