

# **FINISH LIST**

Suppliers and internal Manufacturing Groups must be in compliance with the latest revision of this document.

Therefore, when changes are made to the Finish List or a new finish number added, please notify the:

- Supply Chain Manager to ensure our suppliers are provided the latest revision
- Website Administrator to update Finish List on http://www.hutchinsonai.com/company/forms.cfm

HUTCHINSON 82 South Street Hopkinton, MA 01748

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#### ANODIZE WITH FINISH VARIATIONS

600	Anodize per MIL-A-8625, Type I, Class 1.
601 REV A	Anodize per MIL-8625, Type I – Chromic Acid process or Type II -Sulphuric Acid process, except using clear water seal instead Of Dichromate seal.  Unless otherwise specified on drawing, anodize is to be Class 1 per MIL-A-8625 non-dyed.
602	Anodize per MIL-A-8625, Type II, Class 1.
603	Dull clear anodize per MIL-A-8625. One coat clear baking lacquer, one coat dull clear lacquer.
604	Dull clear anodize per MIL-A-8625. Prime per MIL-P-15328.  One coat dull black instrument baking enamel per Spec. MIL-E-5557, Type 4.
605	Dull clear anodize per MIL-A-8625, coat clear flat lacquer.
606	Black anodize per MIL-A-8625.
607	Black anodize per Spec. MIL-A-8625, then paint one coat with OST D #52 Paint #7. (Black with inhibiting agent added), Source: Universal Coating Co. #504.
608	Dull clear anodize per MIL-A-8625. Black paladin primer, fine black wrinkle per MIL-E-5558, Type I - apply per MIL-E-7851.
609	Black anodize per MIL-A-8625 and dichromate seal.
610	Chromic acid anodize per MIL-A-8625, one coat zinc-chromate primer per MIL-P-6889. Finish with olive drab #2430 per Spec. TT-C-595, semi-gloss, air drying enamel, Grade 1 per Spec. 3-174 (film thickness 1.0 to 1.5 mils dry thickness per Spec. 72-53, Par. E-2-B).

Identical to Finish No. 604, except masking required as per drawing.

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612	Dull clear anodize per MIL-A-8625. One coat zinc chromate primer per MIL-P-6889, and two coats dull black enamel, Munsell N 1.5, Gloss 2-8.
613	Identical to Finish No. 601, except masking or other specifications required as per drawing.
614	Identical to Finish No. 606, except masking required as per drawing.
615	Chromic acid anodize per MIL-A-8625 one coat zinc chromate primer per MIL-P-6889, and two coats black lusterless synthetic enamel, Grade 1 per Spec. 3-173. Masking required as per drawing.
616	Identical to 608, except masking required as per drawing.
617	Identical to 953, except masking required as per drawing.
618 REVA	Bright anodize and sulphuric acid anodize per Spec. MIL-A-8625, Type II* (not to be used on assembled parts) *less dichromate seal.
619	Bright black anodize: ALCOA #R5 chemical brightener and sulphuric acid anodize per Spec. MIL-A-8625, Type II* (not to be used on assembled parts) *less dichromate seal.
620	Identical to 618, except buffing required as per drawing. Area buffed shall be clean and free of all compounds used in buffing operation.
621	Dull clear anodize per MIL-A-8625, Type II, one coat zinc chromate primer per MIL-P-6889, silver-gray light hammertone conforming to Color #1645 of Spec. TT-C-595.
622	Identical to 621, except masking or other qualifications as per drawing.
623	<ul> <li>a. Degrease.</li> <li>b. Black anodize entirely per MIL-A-8625, Type I.</li> <li>c. Prime outside surface only with one coat zinc chromate primer per MIL-P-6889, Type I. Bake for 1/2 hour at 250° F.</li> <li>d. Cover outside surfaces only with one coat dull black enamel (thinned for spraying). Bake for 3 hours at 300° F.</li> </ul>
624	Identical to 619, except buffing required as per drawing.
625	Sulphuric acid anodize per MIL-A-8625, Type II, except omit sealing.

#### CONTROLLED DOCUMENT

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626	Dull clear anodize per MIL-A-8625, Type II. One coat zinc chromate primer per MIL-P-6889, blue medium hammertone.
627	Anodized per MIL-A-8625, and dyed blue.
628	Dull clear anodize per MIL-A-8625, Type II. One coat zinc chromate primer per MIL-P-6808 on surface indicated on drawing.
629	Dull clear anodize per MIL-A-8625, Type II. One coat zinc chromate primer per MIL-P-6808.
630	Finish to 618, then rework per Data Sheet No. 538.
631	Anodize per MIL-A-8625, Type II; apply light green dye.
632	Anodize per Spec. MIL-A-8625, Type II (sulphuric acid process). Brush (non-metallic bristle) to remove surface deposits.
633	Anodize per MIL-A-8625, Type II, glossy paint insignia red color to conform with ANA Bulletin 166, Color No. 509. Masking as required as per drawing.
634	Same as 633, except insignia blue to conform with ANA Bulletin 166, Color No. 502. Masking required as per drawing.
635	Same as 633, except orange yellow to conform with ANA Bulletin 166, Color No. 506. Masking required as per drawing.
636	Same as 633, except green to conform to Spec. TT-C-595, Color No. 1460. Masking required as per drawing.
637	Black anodize per MIL-A-8625, Type II. Spray with medium coat Kissling Co. #1105 instrument black. Air dry 2 hours. Mask threads or other requirements as per drawing.
638	Bright anodize Alcoa #R5 chemical brightener, and sulfuric acid anodize per Spec. MIL-A-8625, Type II. *One coat zinc chromate primer per Spec. MIL-P-6889, and one coat of flat black lacquer. Masking or other specifications required as per drawing. *Less dichromate seal.
	MISCELLANEOUS FINISHES
639	Light caustic etch for threaded parts.

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640 REVA	Finish P513-C (green semi-gloss enamel, Color No. X24084 per Fed. Std. 595) per Spec. MIL-
	F-14072, except primer Step 3, which shall be hi-bake Epoxy #828-025, as supplied by E. I. Dupont DeNemours Co., Inc., Wilmington, Delaware. Primer shall be baked 20 minutes at 350°
	F. Color must conform with color sample in possession of Product Engineering.
641	Phosphate coat with Turco Paintite or equal. One coat Sherwin-Williams Co. Opex Industrial Lacquer #L61Y25, (light yellow). Masking as per drawing.
642	Cadmium plate .0002 thick per QQ-P416, Class 3, Type I, and one coat of primer per MIL-C15328, and two coats of baked gray enamel per MIL-E15090, Type III, Class 1.
643	Hot-tin dip .0005 min. thick per MIL-T-10727, Type II.
644	Prime with Raffi & Swanson #5355-G-36 gray primer. Surfaces should be free of dirt, grease and other foreign substances. Spray with one coat of tweed tone gray, Raffi & Swanson No. 4850G-40; see R & S Teck; Bulletin 111C in possession of special products section.
645	Cadmium plate per QQ-P-416, Type II, Class 1, wash pretreat per MIL-C-15328, zinc chromate primer per MIL-P-8585, two coats of gloss air dry white enamel per TT-E-485, Class A.
646 REVA	Passivate per MIL-STD-171 (ORD) Finish #5.4. Prime with zinc chromate primer per latest version of MIL-P-6889. Paint one coat olive drab semi-gloss enamel per TT-E-529, Color No. 24084, per Fed. Std. 595. (Masking or other qualifications required as per drawing).
647 REVA	Chromate conversion per MIL-DTL-5541, Class 1A. Prime with zinc chromate primer per MIL-P-6889. Paint 2 coats light gray enamel. (MIL-E-15090, Class 2). Color chip #26440 per FED-STD-595. Masking required as per drawing.
648 REVA	Chromate conversion per MIL-DTL-5541, Class 1A. Prime with zinc chromate primer per MIL-P-6889. Paint 2 coats dull black lacquer. Color Chip #37038 (10° max. gloss).
649	Orange Machine Enamel.
650	Brown Machine Enamel.
651	Light Blue Machine Enamel.
652	Gray Machine Enamel.
653	Dark Blue Machine Enamel.

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654	Pink Machine Enamel.	
655	Purple Machine Enamel.	
656	Black anodize per MIL-A-8625, Type I, zinc chromate primer per MIL-P-8585.  Dull black lacquer per MIL-L-6805 painting to conform to MIL-F-7179 and MIL-F-18264 (see drawing for masking requirements).	
657	Black nickel plate. Sperry Finish #8-C. Specification No. M-55625.	
658	Same as 832 finish, except add "masking as per drawing."	
659 REVA	Zinc plate .0005 thick per FE/ZN 12, Type II of ASTM B 633. Masking required as per drawing, one coat of primer in accordance with TT-P-664 or MIL-P-8585 applied as a continuous film .0002 to .001 inch thick; two coats of light gray baking enamel per MIL-E-15090, Class 2, Type III.	
660	Olive drab paint as per Barry Data Sheet #691.	
661	Gray semi-gloss enamel per Federal Spec. TT-E-529, Color per 26173 of Federal Standard 595. Masking required as per drawing.	
662	Finish P213 C (green semi-gloss enamel, E.I. DuPont DeNemours, Type No. 1752-65077, no equivalent is acceptable) per Spec. MIL-F-14072, except primer, Step 3, which shall be Hi-Bake Epoxy #828-025, as supplied by E. I. DuPont DeNemours Company, Inc., Wilmington, Delaware. Primer shall be baked 20 minutes at 350° F. Masking required as per drawing. Color must conform with Collins Color Drift Control Standard No. 385 in possession of Product Engineering Section.	
663	Finish P513 C (green semi-gloss enamel, E. I. Dupont DeNemours, Type No. 1752-65077, no equivalent isacceptable) per Spec. MIL-F-14072, except primer, Step 3, which shall be Hi-Bake Epoxy #828-025, as supplied by E. I. DuPont DeNemours Company, Inc., Wilmington, Delaware. Primer shall be baked 20 minutes at 350° F. Masking required as per drawing. Color must conform with Collins Color Drift Control Standard No. 385 in possession of Product Engineering Section.	
664	Bright alloy plate per Alballoy Process by Hanson-Van Winkle Munning Company, Matawan, New Jersey, or equal.	
665	Passivate per Barry Data Sheet #702.	
666	Passivate per Barry Data Sheet #703.	

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667	Silver Plate per QQ-S-365, Type I.
668	Hot tin dip per Specification MIL-T-10727, Type II, masking as required per drawing.
669 REVA	Zinc plate per ASTM B 633, Type II - FE/ZN12 - plus two (2) coats of paint per MIL-E-15090, Type III - Class 2 - Color 26357 per TT-C-595.
670	Cad. plate .0005 thick and chromate dip per QQ-P-416, Type II, Class 1. One coat zinc chromate primer per MIL-P-6889; two coats light gray medium air drying enamel, Type I, Class 2, per MIL-E-15090.
671	Iridite No. 14 (Alcote) per Spec. MIL-DTL-5541.
672	Iridite No. 14-2 per Spec. MIL-DTL-5541.
673	Copper flash .0001 max. per MIL-C-14550, silver plate .0003 min. per Finish No. 1.7.3 of MIL-STD-171 (ord.).
674	Passivate with a phosphate film per MIL-C-490, Grade I. Prime with one coat of zinc chromate, 0.4 to 0.6 MIL (dry film) thick, per MIL-P-8585. Paint one coat semi-gloss enamel gray, No. 2610 per TT-C-595, per TT-E-529. (This finish is per P211F of MIL-F-14072).
675	Clear, colorless Iridite #14-9 per MIL-DTL-5541.
676	One coat of zinc chromate primer 0.4 to 0.6 MIL (dry film) thick per MIL-P-8585. One coat semi-gloss enamel green (No. 2430) per TT-C-595 and TT-E-529.
677 REVA	Turco #4178-6 per MIL-DTL-5541, Class 1A. Reference Narco Spec. M-04503-1. (Color to match Narco Color Chip No. M-04503-2, which is retained by Product Eng.)
678	Cadmium plate per Finish No. 1.1.2.1 of MIL-STD-171. Chemical Finish No. 5.2 per MIL-STD-171. Primer zinc yellow per TT-P-666. 1 coat air dried or baked. Top coat per System No. 21.9, MIL-STD-171, Color No. 26132 per FED-STD-595, Gloss 10° - 17°.
679 REVA	Cadmium plate .0002 thick, Class 3, Type I per QQ-P-416. Paint with red air drying enamel.
680	Iridite #14. Color to match Narco Color Chip M-04503-1. (Color chip retained by Production Engineering).
681	Chemical black for stainless steel per R.C.A. Specs. 1980173 and 1980032 (R.C.A. Specs. retained by Prod. Eng. Dept.).

- Finish per MIL-F-14072 passivate and zinc chromate primer per MIL-P-8585. Paint semi-gloss enamel, film designation C, Color K No. 2430 per Spec. TT-E-529.
- Abrasive blast per MIL-C-490, Grade II, Type I, where necessary, then hot dip galvanize per MIL-S-17871, then phosphate treat per MIL-T-12879, Type I, Class 1, then wash pretreat per MIL-C-15328. Zinc chromate primer per MIL-P-8585. One coat of high gloss gray, tinted white, air dry enamel, R.C.A. #2016110-37, followed by one coat of high gloss white, air dry enamel, R.C.A. #2016110-4 per R.C.A. Finish Spec. 1985980-1 (R.C.A. Spec. retained by Prod. Eng. Dept.)
- White Machine Enamel.
- Blue Machine Enamel.
- Alodin 1200 or 1200S per Collins Spec. No. 580-0254-00 (color to be golden brassy iridescence, to a golden brown).
- Cad. plate .0002 to .0004 inch thick per QQ-P-416, Type II, Class 3. Pretreat with coating MIL-P-15328 per MIL-C-8507, .0002 to .0003 inch DRY FILM THICKNESS. Top coat with TT-E-489, Class A or B GLOSS ENAMEL .001 DRY FILM or enough to hide. Use Color Number 15045 and Federal Standard 595.
- Aluminum conversion coating per MIL-DTL-5541, Class 1A complete. Prime with one coat of zinc chromate primer 0.4 to 0.6 MIL (DRY FILM) thick per MIL-P-6889. Paint with black non-reflecting enamel conforming to MIL-E-5556 or MIL-E-5557, Type IV. Masking required as per drawing.
- Zinc plate per ASTM B633, FE/ZN8, Type III and bonderize, plus one coat of zinc chromate primer per MIL-P-8585. Paint two (2) coats semi-gloss olive drab enamel, Color No. 24084 per FED-STD-595.
- 690 Identical to 871, except masking or other qualifications as per drawing.
- Oakite Products Inc., chromate process per MIL-DTL-5541, Class 1A. Prime with zinc chromate primer per MIL-P-6889. Paint 2 coats light gray enamel. (MIL-E-15090, Class 2), Color Chip #26440 per FED-STD-595. Apply (1) coat fungus resistant varnish per MIL-V-173 (Brooklyn Paint & Varnish #747). Coat light to minimize yellow tint, but provide complete coverage.

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692	Anodize per MIL-A-8625, Type II, one coat zinc chromate primer per MIL-P-6889. One coat dark gray, semi-gloss enamel, Color No. 26081 per FED-STD-595. Masking required as per drawing.
693	Phosphate dip, one coat zinc chromate primer per MIL-P-8585, two coats gray enamel per MIL-E-15090, Class 2, masking required as per drawing.
694 REVA	Zinc plate per ASTM B633, FE/ZN5, Type III, one coat zinc chromate primer per MIL-P-8585. Plus two coats of green baking enamel per TT-E-489, Color No. 14223 per FED-STD-595.
695 REVB	Cadmium plate (.0005 thick) per QQ-P-416, Type II, Class 1. Prime with one coat of zinc chromate primer per MIL-P-6889. Apply semi-gloss olive drab paint (Color #X24084) per MIL-STD-79.
696 REVA	Chemical film per MIL-DTL-5541, Class 1A and apply two coats Everseal SE-663 flat black epoxy paint, Color No. 36238, to exterior surfaces only, with bake cycle between coats. Masking, if any, as required per drawing.
697	Chromate conversion (electrically conductive) on aluminum. See Barry Data Sheet #790 (Ref. Raytheon Spec. 296MT051).
698	Black enamel (flat) bake. See Barry Data Sheet #791 (ref. Raytheon Spec. 296MT211). Masking required as per drawing.
699	Iridite #14-9 (clear).
	CADMIUM PLATING WITH FINISH VARIATIONS
700	Cad plate .0003 min. and clear colorless chromate treat (Iridite #4P-4 or equal) per QQ-P-416, Class 2, Type II.
701	Cad plate .0002 to .0003 thick, Class 3, Type I, per QQ-P-416.
702	Cad plate .0002 to .0003 thick, and bonderize. Class 3, Type III, per QQ-P-416.
703	Cad plate .0002 to .0003 thick, and parkerize. Class 3, Type III, per QQ-P-416.
704	Cad plate .0003 to .0004 thick, Class 2, Type I, per QQ-P-416.
705	Cad plate .0005 thick, per QQ-P-416, Class 1, Type I.

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706	Cad plate .0005 thick, and bonderize per QQ-P-416, Class 1, Type III.
707	Cad plate .0005 thick, and parkerize per QQ-P-416, Class 1, Type III.
708	Cad plate .0005 thick, and Golden Dichromate Dip per QQ-P-416, Class 1, Type II.
709	Cad plate .0005 thick, and Iridite #8P per QQ-P-416, Class 1, Type II.
710	Identical to 708.
711	Identical to 708.
712	Cad plate .0003 min. and Golden Dichromate Dip per QQ-P-416, Class 2, Type II.
713	Identical to 708.
714	Cadmium plate .0002 to .0003 thick, per QQ-P-416, Type II, Class 3 (Iridite Black).
715	Cadmium plate .0005 thick per QQ-P-416, Type II, Class 1 and Black Iridite.
716	Cadmium plate .0015 to .0020 thick.
717	Electrofilm No. 4396, solid film lubricant over cadmium plate per QQ-P-416, Class 2, Type II.
718	Cadmium plate .0005 thick per QQ-P-416, Type II, Class 1 and Olive Drab Iridite #1.
719	Cadmium plate .0002 to .0003 thick and chromate dip per QQ-P-416, Class 3, Type II.
720	Cadmium plate .0002 to .0003 thick, per QQ-P-416, Class 3, bonderize one coat zinc chromate primer, two coats dark gray enamel per Navy Spec. 52E4, Type III (Munsell 4.5).
721	Cadmium plate .0002 to .0003 thick and olive drab iridite per QQ-P-416, Class 3, Type II.
722	Cadmium plate .0002 to .0003 thick per QQ-P-416, Class 3, bonderize one coat zinc chromate primer, two coats dark gray enamel per Navy Spec. 52E4, Type III, 10° maximum gloss.

723 REVA	Cadmium plate .0002 to .0003 thick per QQ-P-416, Class 3. Bonderize one coat zinc chromate primer, two coats dark gray enamel per Navy Spec. 52E4, Type III, 35° minimum gloss.
724 REVA	Cadmium plate .0005, per QQ-P-416, Class 1. Bonderize one coat zinc chromate primer, two coats dark gray enamel per Navy Spec. 52E4, Type III, 35° minimum gloss.
725	Cadmium plate .0003 min. and Iridite #8 per QQ-P-416, Class 2, Type II.
726 REV A	Anodize per MIL-A-8625, Type II, Class 2 dyed gray.
727 REVA	Cadmium plate .0005 thick per QQ-P-416, Class 1. Bonderize one coat clear metal primer, and two coats machinery gray baking enamel per Raytheon Spec. L44-5837.
728	Cadmium plate .0002 to .0003 thick per QQ-P-416, Class 3, bonderize one coat black paladin primer, fine black wrinkle per MIL-E-5558, Type I.
729	Identical to 728, except masking or other qualifications as per drawing.
730 REVA	Cadmium plate .0005 thick per QQ-P-416, Class 1. Bonderize one coat zinc chromate primer per MIL-P-6889, and two coats light gray air drying semi-gloss enamel per MIL-E-15090, Type I, Class 2.
731 REVA	Cadmium plate .0002 to .0003 thick per QQ-P-416, Class 3. Bonderize one coat zinc chromate primer, two coats light gray air drying semi-gloss enamel per MIL-E-15090, Type II, Class 2. (Primer per MIL-P-6889).
732 REVA	Cadmium plate .0002 to .0003 thick per QQP-416, Class 3. Bonderize one coat zinc chromate, and two coats of light gray baking enamel per MIL-E-15090, Class 2, Type III. (Primer per MIL-P-6889).
733 REVA	Cadmium plate .0002 to .0003 thick per QQ-P-416, Class 3. Bonderize one coat zinc chromate primer, and paint per Federal Spec. TT-C-595, #2610 (similar to machinery gray).
734	Cadmium plate .0003 thick per QQ-P-416, Class 2, chromate dip, one coat zinc chromate primer, per MIL-P-6889, and two coats semi-gloss light gray baking enamel per Spec. MIL-E-15090, Type III, Class 2.

735	Identical to #732, except masking or other qualifications as per drawing.
736	Cadmium plate .0005 thick and chromate per QQ-P-416, Class 1, Type II. Chromate treatment shall be of short duration (approximately five (5) seconds), such that a bright silvery cadmium surface is produced with <u>no visible iridescent yellow coloration</u> .
737	Cadmium plate .0002 to .0003 thick per QQ-P-416, Class 3, and bonderize one coat clear metal primer, two coats machinery gray lusterless baking enamel, Raytheon Spec. L44-5835.
738	Cadmium plate .0005 thick and chromate dip per QQ-P-416, Type II, Class 1, zinc chromate primer per Spec. JAN-P-735. Paint light gray baking enamel per MIL-E-15090, Formula 3, Class 2, Type II.
739	Cadmium plate .0005 thick per QQ-P-416, Class 1, Type I, one coat of clear lacquer.
740	Cadmium plate .0002 to .0003 thick, and bonderize per QQ-P-416, Type III, Class 3. One coat black palladin primer. One coat lusterless black synthetic enamel, Grade I per Spec. 3-173. Masking required as per drawing.
741	Cadmium plate .0005 thick per QQ-P-416, Class 1, and bonderize one coat black palladin primer, one coat black wrinkle enamel, Hazeltine Spec. S-195-D.
742	Cadmium plate .0005 min. thick, and iridite per QQ-P-416, Class 1, Type II. One coat zinc chromate primer per MIL-P-8585; two coats gray semi-gloss enamel, Grade I per 3-174, Color TT-C-595, Shade 2610.
743	Cadmium plate .0002 to .0003 thick per QQ-P-416, Class 3, bonderize one coat of zinc chromate primer, and paint olive drab per MIL-E-11237. Color per TT-C-595, #3412. Masking required as per drawing.
744	Cadmium plate .0003 thick min., and Iridite #8 per QQ-P-416, Type II, Class 2. One coat zinc chromate primer per MIL-P-6889, two coats black semi-gloss baking enamel.
745	Cadmium plate .0005 thick per QQ-P-416, Class 1, bonderize per JAN-C-490, Grade I. One coat synthetic paint primer per TT-P-636. Paint semi-gloss enamel per MIL-E-11857, Class B. Color to be per Federal Spec. TT-C-595, Shade #2610.

746	Cadmium plate .0002 to .0003 thick per QQ-P-416, Type II, Class 3, and olive drab Iridite #1.
747	Identical to Suffix #743, except no masking required.
748	Cadmium plate .0002 to .0003 thick per QQ-P-416, Class 3, bonderize one coat of RCA #430 satin black synthetic. One coat RCA #412, Maring Corps. lusterless green enamel.
749	Cadmium plate .0002 to .0003 thick per QQ-P-416, Class 3, bonderize zinc chromate primer per AN-P-656. Paint per Spec. 3-174, olive drab semi-gloss enamel, Color 2430 per Spec. TT-C-595. Masking per drawing.
750	Cadmium plate .0003 thick per QQ-P-416, Class 2, bonderize one coat RCA #430, satin black synthetic. One coat RCA 838, olive drab, lusterless baked enamel.
751	Cadmium plate .0002 to .0003 per QQ-P-416, Class 3, bonderize one coat zinc chromate primer, two coats lusterless olive drab enamel, Color #319 per USA Spec. 3-1.
752	Cadmium plate .0002 to .0003 thick per QQ-P-416, Class 3, bonderize one coat zinc chromate primer, two coats smokey gray baking enamel, per Spec. 52E4 (Munsell 4.5).
753	Cadmium plate .0002 to .0003 thick, and bonderize per QQ-P-416, Class 3, Type III, and paint with dull black air drying enamel.
754	Cadmium plate and bonderize per QQ-P-416, Type III, Class 2, zinc chromate primer per MIL-P-6889, Type I or II; two coats semi-gloss non-wrinkle gray enamel, Color No. 2610 of TT-C-595, per MIL-E-11857, (Ord.) Class B.
755	Cadmium plate .0003 min. thick, and Iridite #8, hue bright per QQ-P-416, Type II, Class 2. One coat zinc chromate primer per MIL-P-6889. Finish with olive drab baking enamel per TT-E-485, Type IV, color per TT-C-595, No. 1405, Gloss 4° to 12° (60° incidence).
756	Identical to Finish #755, except masking required as per drawing.
757 REVA	Cadmium plate .0003 min. thick, and Iridite #8, hue bright per QQ-P-416, Type II, Class 2. One coat zinc chromate primer per MIL-P-6889, plus two coats olive drab semi-gloss baking enamel per TT-E-529, Class B, Color No. 24084. (Government approved vendor for plating must be used). (Certificate of compliance on paint specifications listed required on each order).

758	Cadmium plate .0005 min. thick per QQ-P-416, Class 1, Type II and olive drab iridite per Air Associates Spec. #PS1007 (per Color Chip #RS-146).
759	Cadmium plate .0002 thick per QQ-P-416, Class 3, Type II and olive drab iridite per Air Associates Spec. #PS1007 (per Color Chip #RS-146).
760	Cadmium plate .0005 thick and chromate dip per QQ-P-416, Class 1, Type II. One coat zinc chromate primer per MIL-P-6889, and two coats semi-gloss, light gray baking enamel per Spec. MIL-E-15090, Type III, Class 2.
761	Cadmium plate .0005 thick, and golden dichromate dip per QQ-P-416, Class 1, Type II, and one coat darkened zinc chromate primer per MIL-P-6889, Type I, Color No. 611.
762	Identical to 761, except masking required as per drawing.
763	Cadmium plate .0005 thick per QQ-P-416, Type I, Class 1. Prime with one coat of wash pretreatment per Spec. MIL-C-15328 applied as a continuous film; .002 to .005 inch thick; paint two coats light gray baking enamel, semi-gloss formula No. 111 per MIL-E-15090.
764	Cadmium plate .0002 thick per QQ-P-416, Class 3, Type I, and one coat of primer per MIL-C-15328, and two coats of baked gray enamel per MIL-E-15090, Class 2.
765	Identical to 733, except masking or other qualifications required as per drawing.
766	Cadmium plate .0005 thick and chromate dip per QQ-P-416, Class 1, Type II. One coat zinc chromate primer per MIL-P-6889, and two coats semi-gloss light gray baking enamel per MIL-E-15090. Type III, Class 2, Color 26307 per TT-C-595.
767	Cadmium plate .0005 thick and chromate dip per QQ-P-416, Class 1, Type II, one coat zinc chromate primer per MIL-P-6889 and one coat of semi-gloss enamel, minimum film thickness .001; Color Green No. 2430 per TT-C-595; Masking or other requirements as per drawing.
768	Cadmium plate .0003 min. thick and Iridite #8, hue bright per QQ-P-416, Type II, Class 2. One coat zinc chromate primer per MIL-P-6889, plus two coats of olive drab lusterless baking enamel per TT-E-527, Color No. 34087 per FED-STD-595.
769	Cadmium plate and chromate dip per Teletype Corp. Manufacturing Process Specification Nos. 10069 and 10032.
770	Identical to 708, except for masking or other specs. as per drawing.
<ul><li>765</li><li>766</li><li>767</li><li>768</li><li>769</li></ul>	two coats light gray baking enamel, semi-gloss formula No. 111 per MIL-E-15090.  Cadmium plate .0002 thick per QQ-P-416, Class 3, Type I, and one coat of primer per MIL-C-15328, and two coats of baked gray enamel per MIL-E-15090, Class 2.  Identical to 733, except masking or other qualifications required as per drawing.  Cadmium plate .0005 thick and chromate dip per QQ-P-416, Class 1, Type II. One coat zinc chromate primer per MIL-P-6889, and two coats semi-gloss light gray baking enamel per MIL E-15090. Type III, Class 2, Color 26307 per TT-C-595.  Cadmium plate .0005 thick and chromate dip per QQ-P-416, Class 1, Type II, one coat zinc chromate primer per MIL-P-6889 and one coat of semi-gloss enamel, minimum film thickness .001; Color Green No. 2430 per TT-C-595; Masking or other requirements as per drawing.  Cadmium plate .0003 min. thick and Iridite #8, hue bright per QQ-P-416, Type II, Class 2. Or coat zinc chromate primer per MIL-P-6889, plus two coats of olive drab lusterless baking enamel per TT-E-527, Color No. 34087 per FED-STD-595.  Cadmium plate and chromate dip per Teletype Corp. Manufacturing Process Specification Nos 10069 and 10032.

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Identical to #708, with the additional provision that plated parts are to be free of all scratches 771 and blemishes. Vendor will wrap all parts in Kraft Paper. Parts are to be inspected before and after sending cut to vendor for abovementioned defects.

772 Cadmium plate per QQ-P-416, Class 1, Type I. Prime zinc chromate MIL-P-8585. Yellow color (1) coat per MIL-P-6808. Enamel equipment light gray, Type III, Class 2, MIL-E-15090 (2) coats. Tapped holes to be free of paint.

#### MISCELLANEOUS FINISHES

773	Obsolete IBM blue (A167), baked enamel (Wright Line Paint No. 001655).
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774 REVA Chemical film per MIL-DTL-5541, Class 1A, zinc chromate primer per MIL-P-6889, lusterless gray paint, Color No. 36231 per Fed. Std. 595.

775 Passivate per MIL-F-14027-E300, black paladin primer per G. E. F32-GP9 and light gray enamel per MIL-E-15090, Class 2, Gloss 20-35, Type II or Type III.

776 Passivate per MIL-F-14027-E300, black paladin primer per G. E. F32-GP9, and light gray enamel per MIL-E-15090, Class 2, Gloss 20-35, Type II. Masking required as per drawing.

777 REVB Chemical Film MIL-DTL-5541, Class 1A. Prime w/zinc chromate primer per MIL-P-6889. Paint 2 coats light gray enamel. (MIL-E-15090, Class 2) Color Chip No. 26440 per Fed. Std. 595.

778 Iridite 14-4 per MIL-DTL-5541.

779 One coat pretreatment primer per MIL-P-15328. One coat primer per MIL-P-8585, Color Y, 2 coats gray enamel per MIL-E-15090, Type III, Class 2.

**780 REVA** Apply yellow chromate conversion coating per MIL-DTL-5541, Class 1A. Clean in a solvent or vapor type degreaser before applying primer. Spray one coat of zinc chromate primer conforming to MIL-P-8585. Spray one coat of semi-gloss gray baking enamel, Fed. Spec. TT-E-529, Class B, Color No. 26173 (Fed. Std. 595) Raffi & Swanson No. 5935, Thinner No. 4047 (or equivalent). Bake three (3) hours at 100° C.

781 Identical to 780, except for masking or other spec. as per drawing.

782 Spray one coat of zinc chromate primer conforming to MIL-P-8585. Spray one coat of semigloss gray baking enamel, Fed. Spec. TT-E-529, Class B, Color No. 26173 (Fed. Std. 595) Raffi & Swanson No. 5935, Thinner No. 4047 (or equivalent). Bake three (3) hours at 100° C; masking or other specifications as per drawing.

783	Cadmium plate .0003 min. thick, and Iridite No. 8, hue bright per QQ-P-416, Type II, Class 2. One coat zinc chromate primer per MIL-P-8585, plus two coats black semi-gloss air dry enamel per TT-E-529, Class A, Color No. 27038. (Vendor must have approval from Government Agency for this process).
784	Cadmium plate .0005 thick, and golden dichromate dip per QQ-P-416, Class 1, Type II. One coat of vinyl resin-zinc chromate primer per Raytheon Spec. No. S223-1112G1, consisting of two (2) parts of S223-1112P5 and one (1) part catalyst, S223-1114P5 and reducer S223-1113P5 as required. One coat of zinc chromate primer, Type I, per MIL-P-8585. Two coats gray paint, semi-gloss, air dry per Raytheon Spec. S223-1223P5. Reference: Raytheon Finish Spec. No. YA388-10016A.
785	Identical to 784, except for masking as per drawing.
786	Phosphoric-acid etch per MIL-C-10578, one coat zinc chromate primer 0.4 to 0.6 mil. (dry film) thick, per MIL-P-8585, one coat semi-gloss gray enamel per TT-E-529, Color No. 2610 per TT-C-595.
787	Cadmium plate - see Barry Data Sheet No. 744.
788	Hot dip galvanize .008010 thick. Additional requirements as per drawing.
789	Phosphate per TT-C-490, Grade III (Turcoat Paintite) or equal lacquer primer per Western Electric Spec. 2152.100 gray lacquer finish per Western Electric Spec. 2043.100.
790	Black paint per Barry Data Sheet 748. Masking or other requirements as per drawing.
791	Passivate copper brazed stainless steel with controls necessary to avoid attacking braze.
792	Process for blackening stainless steel - see Barry Data Sheet No. 753. (Kollsman Spec. KPS-5B.1000a).
793	See Barry Data Sheet No. 754 for procurement and application instructions.
794	Cadmium plate .0005 thick and chromate dip per QQ-P-416, Type II, Class 1. One coat zinc chromate primer per MIL-P-6889. Two coats light gray fast air drying enamel, Type II, Class 2 per MIL-E-15090.
795 CHINSON	Cadmium plate .0003 min. and golden dichromate dip per QQ-P-416, Class 2, Type II. Finish P371Y (forest green (CARC) lusterless gloss, .0018 min. thickness per Spec. MIL-C-46168 per Spec. MIL-F-14072, except primer, Step 3, which shall be an epoxy polyamide, chemical and solvent resistant coating per Spec. MIL-P-23377. Masking required as per drawing.

- Phosphate treat per TT-C-490, Grade 1 (bonderite or equivalent); prime with zinc chromate per latest version of MIL-P-6889; paint one coat green semi-gloss enamel per TT-E-529, Color No. X-24084 per Fed. Std. 595.
- Zinc plate .0005 min. and bonderize per ASTM B633, FE/ZN12, Type III. One coat zinc chromate primer per MIL-P-6889; two coats light gray baking enamel per MIL-E-15090, Class 2, Type III, except glossrange to be 20 to 35. (Hazeltine to supply paint including primer).
- 798 Iridite 14-2 and lusterless black see Barry Data Sheet 759. (Midwestern Instrument Spec. 95B443) masking as per drawing.
- 1. Clean; 2. Passivate with chemical film per MIL-DTL-5541; 3. Prime with one coat of zinc chromate primer, 0.4 to 0.6 mil. (dry film) thick per MIL-P-6889, or apply pretreatment coating, 0.2 to 0.3 mil. (dry film) thick, per MIL-C-15328 followed by primer specified above; 4. Final paint coat shall be Color No. 34087 in accordance with FED-STD-595. (Olive Drab)

#### ZINC PLATING WITH FINISH VARIATIONS

800 REVA	Chemical film per *MIL-DTL-5541, Class 1A, including amendment 1, plus *MIL-P-8585 zinc chromate primer, Color Y, applied per *MIL-P-6808 to a nominal thickness of .004. *Certification required.
801	Zinc plate .0002 to .0003 thick per ASTM B633, Class FE/ZN 5, Type III.
802	Zinc plate .0002 to .0003 thick per ASTM B633, Class FE/ZN 5, Type IV.
803	Identical to 802.
804 REVA	Zinc plate .0003 to .0004 thick per ASTM B633, Class FE/ZN 8, Type III.
805 REVB	Bright zinc plate per ASTM B633, Class FE/ZN 12, Type III.
806 REVA	Zinc plate per ASTM B633, Class FE/ZN 12, Type IV.
807	Identical to 806.
808 REVA	Zinc plate and golden dichromate dip per ASTM B633, Class FE/ZN 12, Type II.
809 REVC	Zinc plate .0005 thick per ASTM B633, Class FE/ZN12, Type I, and luster on dip and leach.
810	Identical to 808.
811	Identical to 808.
812 REVC	Zinc plate .0005 thick per ASTM B633, Class FE/ZN12, Type I, and black phosphate and dip in drying oil.
813	Zinc plate per ASTM B633, Class FE/ZN 25, Type IV.
814	Zinc plate .0002 to .0003 thick per ASTM B633, Class FE/ZN5, Type IV, phosphate dip impregnate with black resin.
815 REVB	Bright zinc plate .0002 to .0003 thick per ASTM B633, Class FE/ZN5, Type I. Within two hours after plating, bake at 275° to 375° F for three hours to relieve embrittlement.
816 REVC	Chemical Film per MIL-DTL-5541, Class 1A. One coat zinc chromate primer per MIL-P-6889 (superseded by MIL-P-8585 which is superseded by TT-P-1757), and cover coat with aircraft

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required as per drawing. Color to be No. 16473 per FED-STD-595.

lacquer gray; (2 coats) painting to conform to TT-L-32 (superseded by A-A-3165). Masking

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Zinc plate .0002 to .0003 thick, and golden dichromate dip per ASTM B633, Class FE/ZN 5, Type II.

818 Identical to 808.

Phosphate per TT-C-490, Grade I. One coat zinc chromate primer .0004 to .0006 thick per MIL-P-8585. Apply two coats of gray enamel to each layer, approximately .001 thick per MIL-E-15090, Type III, Class 1.

820 REVB Zinc plate .0002 to .0003 thick per ASTM B633, Class FE/ZN5, Type I. Bonderize one coat zinc chromate primer, two coats dark gray baking enamel per Navy Spec. 52E4, Type C (MUNSELL 4.5).

Identical to 827, except masking or other qualifications as per drawing.

Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize, one coat chromate primer, two coats dark gray enamel per Navy Specification 52E4, 10° maximum gloss.

Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize one coat zinc chromate primer, two coats dark gray enamel per Navy Specification 52E4, 35° minimum gloss.

Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize one coat of baked zinc chromate, and two coats of gray paint per G. E. Specification F31-GP17.

825 <u>Cancelled</u> - <u>USE 832</u>.

826 REVC Zinc plate .0005 thick per ASTM B633, FE/ZN12, Type I. Bonderize one coat zinc chromate primer, one coat dark gray baking enamel, per Specification 52E4, Type C, minimum gloss 35°.

827 REVC Zinc plate .0005 thick per ASTM B633, FE/ZN12, Type I. Bonderize one coat clear metal primer, and two coats machinery gray baking enamel per Raytheon Specification L44-5837.

Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize one coat clear primer, and two coats machinery gray baking enamel (Munsell 4.5, 35° gloss) Raytheon Specification ZA-296-1048.

Zinc plate, phosphate and paint per the following Bell Telephone Lab., Inc., Specification: Zinc 829 plate 0.0002 inch thick (minimum 23 MSI) per No. 563 (ESA-640030); phosphate per No. 564 (ESA-640031) and paint federal gray enamel per No. 3008JR. (ESA-635014). 830 REVA Zinc plate .0005 thick per ASTM B633, FE/ZN5, Type 1. Chromate dip one coat zinc chromate primer per MIL-P-6889, and two coats light gray air drying semi-gloss enamel per MIL-E-15090, Type I, Class 2. **831 REVB** Zinc plate per ASTM B633, FE/ZN5, Type I. Bonderize one coat zinc chromate primer; two coats light gray semi-gloss air drying enamel per MIL-E-15090, Type II, Class 2. (Primer per MIL-P-6889). 832 REVA Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5 Type I, followed by zinc phosphate per TT-C-490 Type I, followed by one coat zinc chromate primer per MIL-P-6889, and two coats light gray baking enamel, per MIL-E-15090, Type III, Class 2. **833 REVB** Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize one coat clear primer, two coats light gray air drying enamel (35° gloss) Raytheon Spec. ZA-296-1121). **834 REVB** Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. One coat zinc chromate primer, one coat OSTD #52, Paint #37 neutral gray (Arma). **835 REVB** Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize one coat zinc chromate primer, one coat OSTD #52, Paint #7 (neutral gray) with inhibiting agents added (Arma). **836 REVC** Zinc plate .0005 thick per ASTM B633, FE/ZN12, Type I. Bonderize one coat RCA #430 satin black synthetic, one coat RCA #862 smokey gray baking enamel, (RCA #863 finish). **837 REVB** Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize one coat of clear metal primer and two full wet coats machinery gray lusterless baking enamel, per Raytheon Spec. L44-5835. **838 REVB** Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize one coat of brown primer. Paint with machinery gray baking enamel, Munsell 4.5 35° gloss, per Raytheon Spec. YA 296-1048. **839 REVB** Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize one coat gray paladin primer, gray wrinkle enamel. **840 REVB** Zinc plate .0003 thick per ASTM B633, FE/ZN8, Type I. Bonderize two coats RCA #430 satin black synthetic (one coat for primer, one coat for finish).

841 REVC	Zinc plate .0005 thick per ASTM B633, FE/ZN12, Type I. Bonderize one coat black paladin primer, one coat black wrinkle enamel, Hazeltine Spec. S-195-D.
842 REVB	Zinc plate, .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize one coat clear metal primer, 2 coats dull black instrument baking enamel per Spec. MIL-E-5557, Type IV.
843 REVC	Zinc plate .0005 thick per ASTM B633, FE/ZN12, Type I. Bonderize one coat zinc chromate primer, and two coats light gray baking enamel per MIL-E-15090, Class 2, Type III.
844 REVB	Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize one coat zinc chromate primer, two coats light gray enamel per Navy Spec. 52-E-4, Type IV.
845 REVB	Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize one coat zinc chromate primer. Paint lusterless synthetic enamel per MIL-E-11237, Color 3412 per Federal Spec. TT-C-595.
846 REVB	Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize one coat zinc chromate primer and two coats medium gray enamel per Bell Tel. Spec. OD-7403.
847 REVB	Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize one coat zinc chromate primer per JAN-P-735, two coats medium gray air drying enamel per Federal Spec. TT-C-595, Color No. 2615.
848 REVB	Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize one coat zinc chromate primer and two coats of light gray baking enamel (supplied by Hazeltine, their Spec. S257-2).
849 REVB	Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize zinc chromate primer per AN-P-656, paint per Spec. 3-174 olive drab semi-gloss enamel; Color 2430 per Spec. TT-C-595.
850	Zinc plate .0002 to .0003 thick per ASTM B633, Class FE/ZN 5, Type IV. Prime by spraying one (1) coat of R.C.A. #2016114-1 satin black synthetic per R.C.A. Finish Spec. #1908430. Spray two (2) coats of olive drab lusterless enamel per TT-E-527, Color No. 3412 per R.C.A. standardizing notice 98-2-838. (See copies of the following Spec. 1980948, (3) R.C.A. standardizing notice 98-2-838, (4) R.C.A. approval source notice 100-6-948).
851 REVB	Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type 1. Bonderize one coat zinc chromate primer, two coats lusterless olive drab enamel, Color #319 per USA Spec. 3-1.

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852 REVC	Zinc plate .0005 thick per ASTM B633, FE/ZN12, Type I. Bonderize one coat zinc chromate primer per Fed. Spec. TT-P-636. Two coats semi-gloss olive drab enamel per USA Spec. 3-174, Grade 1, Color #2430 per Fed. Spec. TT-C-595.
853 REVB	Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize one coat zinc chromate primer per G.E. Spec. 7710, and two coats G.E. 7496 (blue-gray melamine Glyptal) sprayed and air dried.
854 REVB	Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize one coat zinc chromate primer per MIL-P-6889, finish with black semi-gloss enamel, Grade 1 per Spec. 3-174, Color #2710 per Spec. TT-C-595.
855 REVB	Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize one coat zinc chromate primer, two coats blue semi-gloss baking enamel per Consolidated Eng. Corp., Spec. 24829-941. (May be purchased from Bradley Paint Co., Los Angeles, California). Masking required as per drawing.
856 REVB	Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize one coat zinc chromate primer per G.E. Spec. 7710, and two coats G.E. 8012 (blue-gray finish). Both primer and finish should be reduced using G.E. #1500 thinner to 14-17 seconds using a #3 Zahn Viscosemeter (or equal).
857	Zinc plate .0002 to .0003 thick per ASTM B633, Class FE/ZN 5, Type IV. 1 coat zinc chromate primer, ALKYD type air dried per JAN-B-735. Two (2) coats light gray enamel per MIL-E-15090, Type I, Class 2 (air dried).
858	Identical to 857, except masking or other qualifications as per drawing.
859	Zinc plate .0002 to .0003 thick per ASTM B633, Class FE/ZN 5, Type I. Brown metal primer and medium gray baking enamel per Western Electric Spec. No. 3025JR, and Western Electric Drawing ESA-641403.
860 REVB	Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize one coat zinc chromate primer, two coats insignia red baking enamel, Color #509 per ANA Bulletin #166.
861 REVA	Zinc plate and golden dichromate dip per ASTM B633, Class FE/ZN 12, Type II. One coat zinc chromate primer per MIL-P-6889, two coats light gray baking enamel per MIL-P-15090, Class 2, Type III.
862 REVA	Zinc plate per ASTM B633, Class FE/ZN 12, Type IV. One coat zinc chromate primer per MIL-P-6889, two coats light gray baking enamel per MIL-15090, Type III, Class 2, except gloss range

to be 20 to 35.

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Zinc plate .0002 to .0003 thick per ASTM B633, FE/ZN5, Type I. Bonderize one coat zinc chromate primer and two coats gray baking enamel, Formula No. 13811, Lot No. 62657. (Purchase from A.C. Buschman & Co., Newark, New Jersey).

Zinc plate per ASTM B633, Class FE/ZN 12, Type II or Type III. Two coats of paint per MIL-E-15090, Type II, Class 2, Color 26357 per TT-C-595.

Zinc plate per ASTM B633, Class FE/ZN 12, Type IV. Primer per TT-P-636, plus 2 coats olive drab baked enamel per TT-E-529, Color #2430 per TT-C-595.

#### MISCELLANEOUS FINISHES

866	Passivate per Barry Data Sheet #692.
867	Passivate per Barry Data Sheet #693.
868	Bright alloy plate as per Barry Data Sheet #689.
869	Chemical polish as per Barry Data Sheet #690.
870 REVB	Phosphate treat per TT-C-490, Type I or grit blast. Prime with zinc chromate primer per TT-P-1757, Color Y, and finish with olive drab enamel, Color No. 24084 per TT-C-595. Masking or other specifications as per drawing.
871	Phosphate treat per TT-C-490, Type I or grit blast. Prime with zinc chromate primer per TT-P-1757, Color Y, and finish with light gray enamel per MIL-E-15090, Type II, Class 2 (2 coats of enamel), Color No. 26307 per FED-STD-595.
872 REVA	Anodize and apply instrument black enamel per MIL-E-5557, Type IV (baking), Color No. 37038 per Federal Spec. TT-C-595. Apply per Barry Data Sheet #660. Masking or other specifications per drawing.
873	Prime and finish Marine Corps., Green, Color No. 23 (semi-gloss) in accordance with MIL-T-704, Type A and TT-E-485, Type II.
874	Caustic etch, one coat zinc chromate primer per MIL-P-8585, Type II, fine black wrinkle per MIL-E-5558, Type I (use toluene thinner per Federal Specification TT-T-548), mask as per drawing. Maximum baking temperature not to exceed 250° F.

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875	Phosphate coat per OD-7401, one coat zinc chromate primer (alkyd type) air dried JAN-P-735; two coats light gray air drying enamel, per MIL-E-15090, Class 2, Type I.
876	One coat zinc chromate primer (alkyd type) baked JAN-P-735; two coats light gray enamel per MIL-E-10090, Class 2, Type III.
877	One coat zinc chromate primer; one covering coat light gray machine enamel.
878	Clear sulfuric anodize per MIL-A-8625, Type II, and strontium chromate prime per Barry Data Sheet No. 581.
879	Prime per MIL-C-15328, two coats baked gray enamel per MIL-E-15090, Class 1. See drawing for masking requirements.
880	Light green baking enamel per Barry Data Sheets 588 and 589.
881	Identical to 875, except masking or other qualifications as per drawing.
882	Prime with MIL-P-6889, Type I, zinc chromate primer per MIL-P-6808.
883	Phosphate coat per OD-7401, plus zinc chromate primer and light gray enamel per Western Electric Drawing #MPS-91876, and color chip referenced therein.
884	Identical to 883, except masking or other qualifications as per drawing.
885	Cloth wheel, buff surfaces designated on drawing, and passivate all over.
886	Light vapor blast and passivate.
887	Gray endurion.
888	Prepare surface per Televiso Corp., Spec. #107-129. Prime per Televiso Corp., Spec. #107-128 and paint synthetic lusterless baked gray enamel per Televiso Corp., Spec. #107-127.
889	Prime all over with one coat zinc chromate primer per MIL-P-6889, Type I, bake for 1/2 hour at 250° F. Finish all over with one coat dull black enamel (thinned for spraying). Bake for 3 hours at 300° F.
890	Electroplate 60-40 solder0005 minimum thickness.

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891 REVA	Caustic dip per Barry Finish 909 - satin finish and water dip lacquer.
892	Alodine 600 process, per MIL-DTL-5541.
893	One coat zinc chromate primer, one coat bright red machine enamel.
894	One coat zinc chromate primer, one coat dark gray machine enamel. See drawing for masking requirements.
895 REVA	Caustic dip per Barry Finish 909 - one coat of zinc chromate primer; one coat dark gray machine enamel.
896	One coat dark gray machine enamel.
897	Green strontium chromate, epoxy base primer. See Barry Data Sheet #635.
898	Same as Suffix 897, except masking or other qualifications as per drawing.
899	Alodine 1000 per MIL-DTL-5541 (colorless).

# PASSIVATED FINISHES

900	Zinc phosphate, Type I per TT-C-490.
901 C	Passivate per ASTM A967 or SAE AMS2700 (QQ-P-35 has been superceded).
902	Black passivate, Type I, no post-treatment dip*, Type II, dip in oil, and wipe to remove excess. *(To be used unless otherwise specified). Finish No. 902 has been superseded by Finish Nos. 9087 and 9088.
903	Passivate and black wrinkle.
904	Electropolish and passivate.
905	Passivate and apply zinc chromate primer per MIL-P-6889 on surfaces specified on drawing.
906	Passivate and apply zinc chromate primer per MIL-P-6889 all over.
	OXIDE FINISHES
907	Black oxide per MIL-C-13924, Class 2. (With supplementary preservative treatment). Wipe and remove excess preservative.
908	Black oxide on unplated steel.
	CAUSTIC FINISHES
909 REVB	Colorless Chemical Conversion Coat Per MIL-DTL-5541, Class 1A. Use BDS 1749 when performing Caustic Etch within Barry Controls.
910 REVA	Caustic dip identical to Barry Finish 909.
911 REVA	Caustic dip per Barry Finish 909, dip in thin lacquer (20 parts thinner to 1 part clear lacquer).
912 REVA	Caustic dip per Barry Finish 909, black paladin primer, black wrinkle.
913	Nickel plate per Navy Spec. MIL-P-6859, and black ebonol, Type I, Class A. (.0005" thick plating).

914 REVA	Caustic dip per Barry Finish 909, gray paladin primer, gray wrinkle enamel.
915 REVA	Caustic etch per Barry Finish 909, zinc chromate primer per Spec. MIL-P-6889, Type II, black wrinkle per Spec. MIL-E-5558, Type II.
916 REVA	Caustic etch per Barry Finish 909, one coat of zinc chromate primer per Spec. MIL-P-6889, and one coat of flat black lacquer.
917	Identical to 916, except masking or other qualifications as per drawing.
918 REVA	Caustic dip per Barry Finish 909, and apply zinc chromate primer per MIL-P-6889 on surfaces specified on drawing.
919	Clean and degrease thoroughly. One coat of wash pretreatment per MIL-P-15328 applied as a continuous film 0.0002" to 0.0003" thick. One coat zinc chromate primer per MIL-P-8585. Two coats gray enamel per MIL-E-15090, Class 2, Type III, each coat .001" thick.
920 REVA	Aluminum conversion coating per MIL-DTL-5541, Class 1A (color per drawing and applicable color chips). Color to be yellow unless otherwise specified.
921	Iridite #14 (Alcote) and green dye.
922	Iridite frosted finish on aluminum alloy.
923	Identical to 911, except masking required as per drawing.
924	Iridite #14-2 per Air Associates, Spec. RS404, per color chip supplied by Production Engineering.
925	Iridite #14 (Alcote). Cover with black palladin primer, fine black wrinkle per MIL-E-5558, Type I. Apply per MIL-E-7851.
926	Identical to 927, except less masking.
927	Caustic etch, one coat zinc chromate primer per MIL-P-6889. Olive green lusterless enamel per MIL-E-11237, mask as per drawing.
928	Dichromate per MIL-M-3171, Type III, (Dow No. 7) with masking required as per drawing.
929	Dichromate per MIL-M-3171, Type III, (Dow No. 7).

# SILVER PLATED FINISHES

930	Silver plate .0002 to .0004 thick.
931	Silver plate .0002 to .0004 thick and water dip lacquer, per Collins Spec. 580-0022 00, (per U. S. Army Spec. 72-53, Par. 3-E).
932	Silver plate .0005 minimum thickness, per QQ-S-365, Type I, Grade B.
933	Silver plate .0005 to .00075 thick, and dip in water, dip lacquer per G.E. Spec. F, 45GPL.
934	FLASH silver plate.
935	Dull silver plate 0.0005 to .00075 per G.E. Spec. F70H2C.
936	Silver plate .0002 to .0004, and water dip lacquer per Navy Spec. 46-P-5, Type 1, Class 2.
937	Bright silver plate per QQ-S-365, Type III, Grade A (.0005 min. thick).
938	Bright silver plate per QQ-S-365, Type III, .0005 thick.
	NICKEL PLATED FINISHES
939	Nickel plate .0005 min. thickness per MIL-P-6395, Type I, Class B.
940 REVB	Nickel plate per QQ-N-290, Class 1, Grade G, (thickness per Table I).
941	Copper plate .0002 to .0003 and black oxidize.
942	Black nickel plate .0002 to .0003 thick.
943 REVB	Nickel plate per QQ-N-290, Class 1, Grade E, (thickness per Table I).
944 REV C	Nickel plate per QQ-N-290, Class 1, Grade F, (thickness per Table I).
945	Chromium plate per AN-P-39, Class A, Type I, (0.00002 min.).
946	.0005 thru .0006 copper plate; .0004 to .0005 nickel plate; flash chrome. Minimum build-up .001, maximum build-up .002.

#### MISCELLANEOUS FINISHES

947	Passivate, one coat black paladin primer, two coats dull black baking enamel per MIL-E-11237. Masking required as per drawing.
948	Phosphate coat per U.S. Army Spec. 57-0-2C, Type II, Class C. One coat zinc chromate primer per MIL-P-6889. One coat dark gray enamel per U.S. Navy Specification 52E4, Type C, 35° min. gloss.
949 REVA	Chromate conversion coat per MIL-DTL-5541, Class 1A. One coat zinc chromate primer .0004 to .0006 thick per MIL-P-8585. Apply two coats gray enamel, each layer approximately .001 thick per MIL-E-15090, Type III, Class 1. Mask as required per drawing.
950	Dull black air drying enamel.
951	Zinc chromate primer per Spec. MIL-P-6889, one coat lusterless air drying olive drab enamel.
952	Semi-gloss, machinery gray, air drying enamel per Spec. TT-C-595, Shade #2610 per Spec. 72-53, Table 1, Type I.
953	Black palladin primer, fine black wrinkle, per MIL-E-5558, Type I, apply per MIL-E-7851.
954	Zinc chromate primer, one coat dull black baking enamel.
955	Zinc chromate primer, per Spec. MIL-P-8585.
956	Zinc chromate primer per Spec. MIL-P-8585, two coats dull black baking enamel.
957	One coat zinc chromate primer per Spec. MIL-P-6889, and two coats dull black enamel, Munsell N 1.5, Gloss 2-8.
958	Zinc chromate primer per Spec. MIL-P-8585, Type II, black wrinkle per Spec. MIL-E-5558, Type II.
959	Gray palladin primer, gray wrinkle.
960 REVA	Hot tin dip, .0002 minimum thickness, per MIL-T-10727, Type II. MIL-T-10727 has been deemed obsolete. Please refer to ASTM B 339.
961	Galvanized.
962	Tin plate per Spec. MIL-T-10727 (ord.), Type I0003" minimum thickness.
963	One coat moisture resistant varnish.
964	One coat clear flat lacquer.

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965	Two coats clear spar varnish.
966	Phosphate coat.
967	Phosphate coat per U. S. Army Spec. 57-0-2C, Type II, Class C, finish with dark gray enamel per U. S. Navy Spec. 52E4, Type C, 35° min. gloss.
968	Phosphate coat, one coat black palladin primer, one coat black rubber base gloss paint.
969	Black Japan.
970	Dow #1 chemical treatment.
971	Dip in Oakite #36, and rinse in hot water (per G. E. Spec., P-4-GP2, Part IV) (for alloys of less than 1% copper).
972	Dip in Oakite #36, and rinse in cold running water (per G. E. Spec., P4-GP2, Part V) (for alloys of more than 1% copper).
973	Dip in Oakite #36, rinse in hot water, dip in clear water, dip lacquer per G. E. Spec. F45-GP1.
974	Alodine 1200 process per MIL-DTL-5541.
975	Phosphate coat per U.S. Army Spec. 57-0-2C, Type II, CLass C. Finish with one coat Barrylac traffic marking yellow.
976	Phosphate dip, and one full wet coat of David E. Long Corp., #A-149, yellow paint.
977	Spray with Voplex Corp. polyester resin #331.1352300, yellow paint, and #600.102000 thinner (1 to 1 mix).
978	One coat zinc chromate primer per MIL-P-6889, 2 coats light gray baking enamel per MIL-E-15090, Class 2, Type III.
979	Caustic etch surfaces <u>prior</u> to specified painting operation. One coat zinc chromate primer, and two coats blue semi-gloss baking enamel per Consolidated Eng. Corp., Spec. 24829-941. (May be purchased from Bradley Paint Co., Los Angeles, California).
980	Olive drab endurion and wax.
981	Ebonol "S" (black finish for steel; with lacquer).

982	Medium red baking enamel equivalent of Chem-Lac, Prod. No. 6009.
983	Two coats zinc chromate primer, per JAN-P-735. One coat Marine Corp. green enamel, per Fed. Spec. TT-E-485B.
984	Synthetic gray enamel, Industries Sales Corp., type Seal D "202".
985	Anodize (#600 American Chemical Paint Co.); one coat dull black air-drying enamel.
986	Ferrous chromate.
987	Identical to 974.
988	Lusterless green (olive drab) in accordance with TT-C-595, Color No. 3412. Surface to be bonderized or primed with zinc chromate primer before application of finish coats.
989	Phosphate dip and two coats zinc chromate primer.
990 REVA	Chemical film per MIL-DTL-5541, Class 1A. One coat of zinc chromate primer, 0.4 to 0.6 mil (dry film) thick per MIL-P-6889; one coat semi-gloss enamel (Green No. 2430), per TT-C-595 and TT-E-529.
991	Finish per USAF Spec. Bulletin F29-20-19. One thin coat zinc chromate primer per MIL-P-6889. Apply enamel per MIL-E-7851. Color 1775 (gloss black), Type I (fine wrinkle). NOTE: MASKING AS PER DRAWING.
992	Similar to 953, except masking as per drawing.
993	Alodine 100, per Bendix Spec. BM843A.
994	Yellow machine enamel.
995	Red machine enamel.
996	Green machine enamel.
997	Electrolize, .0001 to .0002 thick.
998	One coat zinc chromate primer per MIL-P-6889, Type I. Two coats dull black enamel per MIL-E-11237. Masking required as per drawing.
999	Zinc chromate primer per MIL-P-6889, Type II. Lusterless enamel (baked or air dried) per TT-E-527, Color 3725 (black) per TT-C-595.
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Hopkinton, MA 01748

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# ANODIZE WITH FINISH VARIATIONS

	ANODIZE WITH FINISH VARIATIONS
6001	Identical to Finish #602, except color to be matched with color chip marked "20593".
6002	Bright black anodize: Alcoa #R5 chemical brightener and chromic acid process, per Spec. MIL-A-8625, Type I, less dichromate seal/zinc chromate primer, per MIL-P-6889. Paint two coats, dull
	black lacquer; Color Chip #37038 (10° max. gloss). Mask and paint, as required per drawing.
6004	Bright black anodize: Alcoa #R5 chemical brightener and chromic acid process per MIL-A-8625, Type I, less dichromate seal.
6005	Black anodize: chromic acid process per MIL-A-8625, Type I.
6006	Hard anodize per MIL-A-8625, Type III, .003004 thick.
6007	Anodize per Finish 7.1.1 of MIL-STD-171. Apply 1 coat zinc chromate primer, Spec. MIL-P-8585 per MIL-P-6808, and 2 coats (.0007 to .0012 each) enamel, Class 2, per MIL-E-15090.
6008	One coat of zinc chromate primer, 0.4 to 0.6 mil (dry film) thick per MIL-P-8585; one coat lusterless green enamel (Color No. 3412) per TT-C-595 and TT-E-527.
6009	Bright black anodize: Alcoa #R5 chemical brightener and chromic acid process per MIL-A-8625, Type I, less dichromate seal followed by zinc chromate primer per MIL-P-8585. Paint 2 coats dull black enamel per TT-E-527. Color No. 37038 per FED-STD-595. Masking required as specified on applicable drawing.
6010	Bright black anodize: Alcoa #R5 chemical brightener, and sulphuric acid anodize per Spec. MIL-A-8625, Type II*, (not to be used on assembled parts) *less dichromate seal. Followed by zinc chromate primer per MIL-P-8585. Paint 2 coats dull black enamel per TT-E-527, Color No. 37038, per FED. Std. 595. Masking required as specified on applicable drawing.
6011	Black anodize per MIL-A-8625. Type II, Class 2.
6012	Black anodize per MIL-A-8625, Type II, Class 2. Prime with zinc chromate primer per MIL-P-8585. Paint 2 coats dull black enamel per TT-E-527, Color No. 37038, FED-STD-595, masking required as specified on drawing.
6013	Black anodize per MIL-A-8625, Type I or II, Class 2.
6014	Blue anodize per MIL-A-8625, Type II, Class 2.
6015	Anodize and gray die per MIL-A-8625, Type I, Class 2. Color to approximate MIL-E-15090, gray enamel.

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6016	Anodize per MIL-A-8625, Type I, Class 1, and paint with darkened green zinc chromate primer, AN Color No. 611; primer to conform with TT-P-1757. Masking required as specified on
	drawing.
6017	Anodize per MIL-A-8625, Type I. One coat epoxy primer per MIL-P-23377.
6018	Sulphuric acid anodize, and dye gray per MIL-A-8625, Type II, Class 2. Color of dye to match engine gray of FED-STD-595, Color No. 16081.
6019	Apply aluminum conversion coat per MIL-DTL-5541, Class 3. Mask areas indicated by drawing. Anodize per MIL-A-8625, Type I, Class 1.
6020	Anodize per MIL-A-8625, Type III, .002 thk. Mask per drawing.
6021	Anodic coating to MIL-A-8625, Type III, Class 2, Color: olive drab (approximating FED-STD-595, Color Number 34102).
6022	a) Black hardcoat anodize .00150025 thk. per MIL-A-8625, Type III, Class 1, with teflon dispersion coat by the Sanford process.
	Approved source of supply:
	Duralectra Corporation Natick, MA 01760
	b) Prior to anodizing mask indicated areas as shown on drawing, masked area to be chemical film per MIL-DTL-5541, Class 1A.
6023	Anodize per MIL-A-8625, Type III, Class 1.
6024	Anodize per MIL-A-8625, Type III, Class 1, .002 to .003 thick.
6025 REV A	Sulfuric acid anodize per MIL-A-8625, Type II, Class 2. Dye color similar to AMS-STD-595 COLOR 36628, FLAT ALUMINUM.

# CADMIUM PLATE WITH FINISH VARIATIONS

7002	Cad plate per QQ-P-416, Class 1, Type II, primicoat of wash pre-treatment per MIL-P-15328, applied as a continuous film .0002 to .0005 in. thick. Paint 2 coats light gray enamel, Formula III, per MIL-E-15090, Type II, Class 2.
7003	Cad plate per QQ-P-416, Class 3, Type III, phosphate dip and prime with zinc chromate per MIL-P-6889, and finish with gray enamel (lusterless) per MIL-E-15090, Class 2. Color #36231 per FED-STD-595. Threads must be free of paint.
7004	Cad plate per QQ-P-416, Class 3, Type II, 1 coat zinc chromate primer. Paint lusterless black, Color No. 37038, per FED-STD-595. Masking required as per drawing.
7005	"Finish per MIL-F-14072 - P373E: Cadmium plate .0005 thick per QQ-P-416, Type II, Class 1, prime with one coat 0.2 to 0.3 MIL (dry film) thick per MIL-C-15328. Paint one coat light gray semi-gloss enamel, 1.0 MIL thick per MIL-E-15090".
7006	Cad plate per QQ-P-416, Class 1, Type II. Paint per MIL-F-14072 - P371, semi-gloss gray enamel per MIL-E-15090, Type II, Class 3.
7007	"Cad plate .0005 min., and yellow dichromate per QQ-P-416, Class 1, Type II, in such a manner as to provide for maximum paint adhesion (when followed by zinc chromate, wash primer and baked enamel). No wetting agent of any kind may be used in rinses at any time in the processing. Finished parts must NEVER be delivered to us less than 24 hours after dichromating".
7008 REVA	Cad plate per QQ-P-416, Class 1, Type II, one (1) coat zinc chromate primer per MIL-P-6889, and two (2) coats semi-gloss light gray baking enamel per MIL-E-15090, Type III, Class 2.
7009	Same as 7008, except masking required as per drawing.
7010	Cad plate .0005 thick, and golden dichromate dip per QQ-P-416, Class 1, Type II, and paint one coat of black lacquer.
7011 REVB	Cadmium plate per QQ-P-416, Type II, Class 1; primer per TT-P-666, Class A or B; paint per Color 24084 (olive drab) per FED-STD-595 (2 coats).
7012	Cadmium plate .0003 to .0005 thick, and chromate per QQ-P-416, Class 2, Type II. Chromate treatment shall be of short duration (approx. 5 sec.), such that a bright silvery cadmium surface is produced with no visible iridescent yellow coloration.
7013	Cadmium plate .0003 thick minimum, and Iridite #8 per QQ-P-416, Type II, Class 2. Prime one coat, 0.75 to 1.25 MIL. Dry film thickness of Phenolic primer coating per MIL-P-12742. Apply

1.50 to 2.50 MIL dry film thickness of Phenolic enamel in accordance with TT-E-522, modified to match Marine Corps. Green #23, gloss infrared reflectance optional.

- Cadmium plate and chromate per QQ-P-416, Class 3, Type II. Chromate treatment shall be of short duration (approximately 5 seconds) such that a bright silvery cadmium surface is produced with no visible iridescent yellow coloration.
- 7015 Identical to 768, except masking required as specified on drawing.
- Cadmium plate per QQ-P-416, Type II or III, Class 1, one coat of zinc chromate primer 0.4 to 0.6 mil (dry film) thick per MIL-P-8585, or one coat of synthetic paint primer 0.8 mil minimum (dry film) thick per TT-P-636, or TT-P-664. Paint with (1) coat lusterless olive drab enamel, 1.0 to 1.5 mil (dry film) thick per TT-E-527, Color No. 34087 per FED-STD-595. (Finish M224 & P371A per MIL-F-14072).
- 7017 Identical to 7016, except masking required as specified on drawing.
- Cadmium plate per QQ-P-416, Type II, Class 1. Apply 2 coats of paint, enamel, alkyd, lusterless, Comp. G, Color #36236 (gray) per TT-E-527. Do not paint threads.
- Cadmium plate .0005 minimum thickness per QQ-P-416, Class 1, Type III. Epoxy paint per MIL-P-23236, Class 2 (color, black), Type I. Paint the steel surfaces with coating system as required to obtain the number of coats, and a dry minimum total thickness as specified by each manufacturer listed in the qualified products list, QPL 23236.
- Cadmium plate and olive drab iridite per QQ-P-416, Type II, Class 1 (Barry 718). Then prime with pre-treatment coating, 0.2 to 0.3 mil (dry film) thick per MIL-P-15328, followed by either 1 coat of zinc chromate primer, 0.3 to 0.6 mil (dry film) thick per MIL-P-8585, or one coat of synthetic paint primer, 0.8 mil minimum (dry film) thick per TT-P-636. Paint with 1 coat lusterless olive drab enamel, 1.0 to 1.5 MIL (dry film) thick per TT-E-527, Color No. 34087 per FED-STD-595. Priming and painting to be applied to only those surfaces specified on the applicable drawing.
- 7021 Cancelled.
- 7022 REVA Zinc plate, Type II, FE/ZN8, in accordance with ASTM B633. Wash primer per MIL-P-15328, applied as a continuous film, .0002 to .0005 thick followed by one (1) coat of zinc chromate primer per MIL-P-8585 applied as a continuous film .0005 to .0010 thick. Apply two (2) coats of gray enamel per MIL-E-15090, FE/ZN8, applied as continuous films approximately .001 thick.

Same as 7022, except masking required as per drawing before priming and painting. 7023 7024 Cadmium plate, per QQ-P-416, Class 2, Type II. Hydrogen embrittlement relief, 3 hrs. minimum at  $375^{\circ} + 25^{\circ}$  F, within 1 hr. after plating. 7025 Cadmium plate per QQ-P-416, Class 2, Type II. Omit plating in area specified on drawing. 7026 .0002" min., bright cadmium plate with luster-on (trademark of the Chemical Corp.). 7027 Grit blast, then cadmium plate per QQ-P-416, Type II, Class 2. 7028 (For parts previously finished per 7027). Apply 1 coat zinc chromate primer per TT-P-1757, Color Y, and 2 coats of light gray enamel per MIL-E-15090, Type II, Class 2. Mask as required per drawing. 7029 Cadmium plate per QQ-P-416, Type II, Class 2. Apply 1 coat of zinc chromate primer per TT-P-1757, Color Y, and 2 coats of light gray enamel per MIL-E-15090, Type II, Class 2. 7030 Cadmium plate per QQ-P-416, Type II, Class 1 (Barry 708). Prime with pretreatment coating, 0.2 to 0.3 mil (dry film) thick per MIL-P-15328, either one coat zinc chromate primer, 0.3 to 0.6 mil (dry film) per MIL-P-8585, or 1 coat of synthetic paint primer, 0.8 mil min. (dry film) thick per TT-P-636, 1 coat semi-gloss gray enamel per TT-E-529, FED-STD-595, Color #26152 (Finish M224 and P371F of MIL-F-14072). 7031 Cadmium plate per QQ-P-416, Type II, Class1. Pretreatment coating per MIL-C-8514. Zinc chromate per TT-P-1757. Paint per MIL-F-14072, lusterless forest green per MIL-E-52835. 7032 Identical to 7031, except masking required as specified on drawing. 7033 (Applies to parts which have been previously plated per Barry 712). Mask as required. Apply 1 coat of zinc chromate primer per TT-P-1757, Color Y, and 2 coats of light gray enamel per MIL-E-15090, Type II, Class 2. 7034 REVA Cadmium plate per QQ-P-416, Class 1, Type I. 7035 REVA Cadmium plate per QQ-P-416, Class 1, Type III. Prime with zinc chromate primer per TT-P-1757, Color Y. Paint with light gray enamel per MIL-E-15090, Type III, Class 2. Mask as specified on drawing. 7036 Cadmium plate per QQ-P-416, Type II, Class 1 (Barry 708). Pretreatment coating per MIL-P-53288. One coat primer per TT-P-1757, lusterless forest green enamel (0.381-0.0508 mm thick) per MIL-E-52798. (Finish M224 & P371.1 V per MIL-F-14072).

- 7037 Identical to 7036, except masking required as specified on drawing.
- 7038 REVA Cadmium plate per QQ-P-416, Class 2, Type II, with baking to prevent hydrogen embrittlement. Certificate of Conformance required.
- Cadmium plate per QQ-P-416, Type II, Class 1 (Barry 708). Phosphate treat per TT-C-490, Type I. Prime with zinc chromate primer per TT-P-1757, Color Y, and finish with 2 coats of light gray enamel per MIL-E-15090, Type II, Class 2, Color #26307 per FED-STD-595 (Barry 9336).
- Cadmium plate with gold dichromate dip per QQ-P-416, Class 1, Type II, except thickness to be .001 minimum.
- Cadmium plate in accordance with QQ-P-416, Type II, Class 2, over copper plate in accordance with MIL-C-14550, Class 4. Bake for Hydrogen embrittlement relief.

#### ZINC PLATE WITH FINISH VARIATIONS

- 8001 REVB Zinc plate per ASTM B633, Class FE/ZN 12, Type IV. 1 coat synthetic primer per TT-P-636. Two coats semi-gloss, olive drab enamel per TT-E-529, Color No. 24084 per FED-STD-595.
- 8002 REVB Zinc plate .0002 to .0003 thick per ASTM B633, Class FE/ZN 5, Type IV. One coat of zinc chromate primer per MIL-P-8585. Paint two coats semi-gloss, olive drab enamel, Color No. 24084 per FED-STD-595.
- 8003 Identical to 819, except masking required as per drawing.
- Zinc plate .0002 to .0003 thick per ASTM B633, Class FE/ZN5 Type I, phosphate Grade I per TT-C-490, one coat zinc chromate primer per MIL-P-8585. Paint per Fin. No. 21.3 of MIL-STD-171B, Color No. 24201, FED-STD-595.
- 8005 Do not use.
- Primer: one coat of wash pretreatment in accordance with MIL-P-15328, applied as a continuous film 0.0002 to 0.0005 inch thick, or hot dip-tank phosphate treatment per TT-C-490, Type I, followed by one coat of primer per TT-P-664, or MIL-P-8585 applied as a continuous film 0.0002 to 0.001 inch thick. Finish: two coats of formula III, gray semi-gloss enamel according to MIL-E-15090, Type III (baking), Class 2 (semi-gloss).
- 8007 REVA Zinc plate and golden dichromate dip per ASTMB 633, Class FE/ZN 12, Type II, in such a manner as to provide for max. paint adhesion. (No wetting agent of any kind is to be used in rinses). Follow, NEVER less than 24 hours after dichromating, with one coat of primer per Spec. TT-P-664, or MIL-P-8585, applied as a continuous film, .0002 to .001 inch thick, and two coats of light

HUTCHINSON 82 South Street Hopkinton, MA 01748 gray enamel per MIL-E-15090, Type III, Class 2 (baked as continuous films approximately .001 inch thick).

- 8008 REVA Zinc plate and golden dichromate in such a manner, as to provide for max. paint adhesion and dip per ASTM B633, Class FE/ZN 12, Type II. Masking per drawing, if required, (when followed by zinc chromate wash primer baked enamel). No wetting agent of any kind may be used in rinses at any time in the processing. Finished parts must never be delivered to us less then 24 hours after dichromating.
- Zinc plate per ASTM B633, Class FE/ZN 8, Type II, or Type III.
- 8010 REVA Zinc plate per ASTM B633, Class FE/ZN 12, Type II, or Type III. Prime by applying pretreated coating, 0.2 to 0.3 MIL. (Dry film) thick per MIL-C-15328, followed by either one coat of synthetic paint primer, 0.8 MIL minimum (dry film) thick, per TT-P-636, or one coat of zinc chromate primer 0.4 to 0.6 MIL, (dry film) thick per MIL-P-6889. Paint with one coat semi-gloss enamel per TT-E-529, Color X24-087 per MIL-STD-795, 1.0 MIL thick.
- 8011 Identical to 8010, except masking per drawing.
- Zinc plate per ASTM B633, Class FE/ZN 25, Type I.
- 1. Zinc plate per ASTM B633, Class FE/ZN 25, Type II or Type III.
  - 2. Paint in accordance with Barry Data Sheet 954.
- 8014 Identical to 8013, except masking or other qualifications as per drawing.
- 1. Zinc plate per ASTM B633, Class FE/ZN 25, Type II or Type III.
- Zinc plate .00015 thick.
- Zinc plate .0002 to .0003 thick, and black supplemental dip per ASTM B633, Class FE/ZN 5, Type II.
- 8018 REVA Zinc plate per ASTM B633, Class FE/ZN 12, Type II or Type III. Mask areas as per drawing; hot dip-tank phosphate treatment per TT-C-490, Type I; one coat of primer per TT-P-644 or TT-P-1757 applied as a continuous film .0002 to .001 thick; paint per MIL-E-15090, Type III, Class 2; two coats of light gray enamel (baked) as continuous films, each (approx.) .001 thick, Color No. 26307 per FED-STD-595.
- Zinc plate per ASTM B633, Class FE/ZN 5, Type IV. Apply one coat of primer 0.0005 to 0.002 inch film thickness per TT-P-664. Apply two coats of gray enamel (Formula No. 111) per MIL-E-15090, Type III, Class 2 as continuous film, each approximately 0.001 inch thick.

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Phosphate treat per TT-C-490, Type I, or grit blast. Prime with zinc chromate primer per TT-P-1757, Color Y. Masking required as per drawing before priming.

(For parts previously finished per Suffix 8020). Mask as per drawing, and apply 2 coats of light gray enamel per MIL-E-15090, Class 2.

8022 REVA Zinc plate with supplemental olive-drab chromate dip per ASTM B633, Class FE/ZN 12, Type II.

8023 1. Zinc plate per ASTM B633, Class FE/ZN 25, Type II or Type III.

- 2. Paint in accordance with Barry Data Sheet 1095.
- Mask as specified on drawing.
- 8024 REVA A. Zinc plate per ASTM B633, Class FE/ZN 12, Type II or Type III.
  - B. Prime, wash, pretreatment blue (Formula No. 117-B, for metals) per MIL-P-15328.
  - C. One coat primer 0.8 MILS min. thick (dry film) per TT-P-636.
  - D. One coat green paint per TT-E-529, Color No. 24533 per FED-STD-595, 0.0254-0.381 MM (0.001-0.0015 mils) thick dry film.
  - E. Masking required as specified on drawing.

8025 REVA Zinc plate per ASTM B633, Class FE/ZN 12, Type II (Barry 808). Pretreat per MIL-P-15328; one coat primer per TT-P-1757; paint with black lusterless enamel, ALKYD (.0254-.0381 MM thick) per TT-E-527, Color No. 37038 per FED-STD-595. Masking or other specifications per drawing.

8026 REVA Zinc plate, per ASTM B633, Class FE/ZN12, Type II.

8027 REVA Bright zinc plate per ASTM B633, Class FE/ZN 12, Type I. One coat primer per MIL-P-23377, Type II. Masking required when specified on drawing.

Paint procedures per MIL-STD-193, prime per TT-P-1757. Paint with forest green enamel per MIL-E-52798, or MIL-E-52835.

Zinc plate per ASTM B633, Class FE/ZN 8, Type II.

8030 REVA Identical to 804.

Zinc plate per ASTM B633, Class FE/ZN 8, Type IV.

8032 REVA Identical to 805.

Zinc plate per ASTM B633, Class FE/ZN 25, Type II.

Zinc plate per ASTM B633, Class FE/ZN 25, Type III.

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8036 REVA Electroless nickel plate per MIL-C-26074 or AMS2404, .0001 thick followed by zinc plate per ASTM B633, Class FE/ZN 5, Type III.

8037 REVA Zinc plate per MIL-F-14072, Finish Number M226, per ASTM B633, Type II, Class FE/ZN 12.

8038 Finish 1.9.2.3 of MIL-STD-171, except .0003 thick.

8039 REVA Zinc plate per ASTM B633, Class FE/ZN 12, Type II. Bake at 375° F min. for 3 hours within 4 hours of electroplating. Baking operation shall be performed after plating and before dichromate treatment.

8040 CARC painted in accordance with MIS-20007, Type I, Condition B, Grade 1 over zinc plating with chromate conversion coating in accordance with ASTM B633, Type II, SC3 or SC4.

Zinc plating and chromate conversion coating must be performed by a Raytheon approved processor listed in Raytheon document QN 050. The processor must provide a certificate of analysis with each lot with the following information:

- Processor's Name and Address
- Purchase Order Number
- Part Number, Revision and Lot Quantity
- Each process applied to the item(s) covered in the purchase order.
- Actual test results (composition, thickness, adhesion, etc...)

Facility performing the painting must be a Raytheon approved facility listed in Raytheon document ON 090.

Per paragraph 1.3 of Raytheon document QN 090, the facility performing the painting must supply a Certificate of Conformance with the parts that lists the following:

- Supplier's Name
- MIS-20007
- Part Number
- Thickness and dry tape tests were performed and meets the requirements of MIS-20007.
- Weekly wet tape tests were performed on the parts while CARC painting the parts per MIS-20007.
- Raytheon Approval Form per paragraph 2.1 of Raytheon document QN 090.

All drawing dimensions apply before painting. Paint shall not be applied to threaded holes. Unless otherwise specified on the drawing, paint shall be applied to all non-threaded holes.

Electroplate Tin/Zinc alloy over ferrous surfaces IAW Ford Motor Company Specification WSE-M1P93-A1. Color to be iridescent green chromate treatment, blue chromate optional, IAW WSE-M1P93-A1.

Finish per Army TACOM drawing 12469117 (Cage Code 19207). This finish is known within AM General as the "Dorrltech type finish" or as Magni 560 or Magni 565.

Zinc Nickel Alloy Plate Per AMS 2417, Type 2.

8044 REVA Zinc plate per ASTM B633, Type II, Fe/Zn 12 (SC3) or FE/Zn 25 (SC4)

# MISCELLANEOUS

9001	Nickel plate per ECI Spec. #49-00038-039.
9002	Prime one coat of wash pretreatment per MIL-P-15328, applied as a continuous film .0002 inches thick. Paint two (2) coats light gray enamel Formula III per MIL-E-15090, Type II, Class 2.
9003	Passivate (treatment of stainless steel 416, 17-4 PH and 17-7 PH only) after heat treat using Virgo Descale (Wheeler Chemical Company) or equal.
9004 REVA	Chromate conversion coat per MIL-DTL-5541, Class 1A. Prime with zinc chromate primer per MIL-P-8585. Finish with light gray enamel per MIL-E-15090, Class 2.
9005	Iridite 14-4, and light gray enamel per MIL-P-15090, Type II, Class 2, color per FED-STD-595 No. 26307 (paint supplied by ARMA Corp.).
9006	One coat pretreatment primer per MIL-P-15328; one coat primer per MIL-P-8585, Color Y; two (2) coats gray enamel per MIL-E-15090, Type III, Class 2.
9007	Identical to 9005, except masking required as per drawing.
9008 REVA	Alum. conversion coat per MIL-DTL-5541, Class 1A. Paint one (1) coat zinc chromate primer per MIL-P-8585, and two (2) coats enamel per TT-E-527, baked, Color No. 37038 per FED-STD-595. Masking required as per drawing.
9009	Nickel plate per QQ-N-290, Class 2, over cadmium plate per QQ-P-416, Class 2, Type I.
9010	Do not use.

9011	Caustic etch zinc chromate primer per MIL-P-6889, Type I. Finish with black wrinkle enamel per MIL-E-5558. Masking per drawing.
9012	Caustic etch zinc chromate primer per MIL-P-6889, Type I. Finish with black lusterless synthetic enamel, Grade I, per Spec. AN-E-13. Masking per drawing.
9013	Black endurion and profilm #1001 coating per MIL-P-16232, Class 4E.
9014	Silver plate .0005 thick per Spec. QQ-S-365, Type II.
9015	Non-etchant alkaline solution, and Iridite #14-9, clear and colorless per MIL-DTL-5541.
9016	Zinc chromate primer per MIL-P-8585 and gray enamel per TT-E-529, Class B, Collins Color Number 225.
9017 REVA	Nickel plated, Class 1, Grade C, (DS) (.002 thick copper plus nickel). Matte finish per Spec. QQ-N-290.
9018	Silver lacquer.
9019	Brass plate .00015 to .00020 thick, and water dip lacquer.
9020 REVA	Nickel plated per QQ-N-290, Class 2, .0005 thick.
9021	Pretreatment coating 0.0002 to 0.0003 thick per MIL-C-15328, followed by one coat of zinc chromate primer, 0.0004 to 0.0006 thick per MIL-P-8585. Finish, paint one coat of semi-gloss baking enamel per TT-E-529, Color No. 26231 of FED-STD-595, thickness 0.001, bake per MIL-F-14072.
9022	Black semi-gloss lacquer.
9023	Zinc chromate primer in accordance with MIL-P-8585, Type II.
9024	Commercial brass plate.
9025	Zinc chromate primer per MIL-P-8585; one coat of semi-gloss black enamel per TT-E-529, Color No. 27038 of FED-STD-595. Finish to be in accordance with Bendix Corporation Finish No. 1854025. Masking required as per drawing.
9026	One coat of zinc chromate primer per MIL-P-8585, Color Y, and finished with 2 coats of gray enamel per MIL-E-15090, Class 2, Type III.
<b>9027</b> HINSON	Identical to 9026, except masking required as per drawing  42

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- 9028 REVA Pretreat surface in accordance with MIL-DTL-5541, Class 1A. Apply one coat zinc chromate primer per MIL-P-8585 (AER) in accordance with MIL-P-6808 (ASG), apply two (2) coats ANA604 camouflage black enamel per MIL-E-5556. All finishes shall be applied in strict accordance with MIL-F-7179 and MIL-F-18264.
- P513 per Spec. MIL-F-14072, (chemical film to be yellow iridescent color). Paint final film with one (1) coat of lusterless enamel, .001 min. thick per TT-E-527, Color No. 36231, dark gull gray per FED-STD-595. Primer and paint all edges and surfaces indicated ONLY. Bake at 225° F max.
- Cad plate per M252 of MIL-F-14072, followed by pretreatment coating 0.2 to 0.3 mil (dry film) thick per MIL-C-15328; followed by one (1) coat of rust inhibiting primer 0.6 mil minimum (dry film) thick per MIL-P-11414; followed by two (2) coats 0.001 thick, each of light gray semi-gloss enamel (Formula 111) per MIL-E-15090.
- 9031 See Data Sheet 889.
- Passivate per QQ-P-35. Prime with zinc chromate primer per TT-P-1757, Color Y, and finish with light gray enamel per MIL-E-15090, Class 2.
- Passivate per QQ-P-35. Prime with one (1) coat (.0005 to .001 thick) of zinc chromate primer per TT-P-1757, Color Y, and finish with two (2) coats (approx. .001 thick each coat) of light gray enamel per MIL-E-15090, Class 2. Mask where required.
- Identical to 608, except masking required as per drawing.
- Houghto-black 15, (E.F. Houghton & Co.) per MIL-C-13924, Class 1, Grade A, B, & C.
- 9036 REV A Black Epoxy paint per MIL-PRF-23236, Types V, VI or VII, any Class except 15, Grades A, B or C, but Grade C is preferred. Please note that MIL-PRF-23236 has made Type I and Classes 1 and 2 obsolete.
  - A. Wipe steel surfaces clean of grease, and oil with a clean rag; wet with solvent.
  - B. Sandblast steel surfaces.
  - C. Paint the steel surfaces with coating system as required to obtain the number of coats, and a dry minimum total thickness as specified by each manufacturer listed in the Qualified Products List (QPL 23236).

CAUTION REQUIRED WHEN MIXING OR APPLYING PER DATA SHEET 1155.

9037 REV B Nickel plate, Class 1, Grade C per QQ-N-290.

Cadmium plate per QQ-P-416, Type II or III, Class 1. Prime by applying pretreatment coating, 0.2 to 0.3 mil (dry film) thick per MIL-C-15328, followed by either one coat of synthetic paint primer, 0.8 mil minimum (dry film) thick, per TT-P-636, or one coat of zinc chromate primer, 0.4 to 0.6 mil (dry film) thick, per MIL-P-6889. Paint with one coat semi-gloss enamel per TT-E-529, Color X24-087 per MIL-STD-795, 1.0 mil thick.

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9039 A	Prime by applying pretreatment coating, 0.2 to 0.3 mil (dry film) thick per MIL-C-15328, followed by either one coat of synthetic paint primer, 0.8 mil minimum (dry film) thick, per TT-P-636, or one coat of zinc chromate primer, 0.4 to 0.6 mil (dry film) thick, per MIL-P-6889. Paint with one coat semi-gloss enamel per TT-E-529, X24-087 per MIL-STD-795, 1.0 mil thick. Mask per drawing.
9040	Apply one coat of rust inhibiting zinc chromate primer (dip or spray). Apply two coats of semi-gloss gray enamel, Color 26373, in accordance with FED-STD-595, "Colors". Each finish coat (Type II or III) shall be free from checking, dulling, wrinkling, and other imperfections.
9041	Prime one (1) coat per MIL-D-8585, .0005 to .001 thick. paint two (2) coats of gray enamel per MIL-E-15090, Class 2 (approx001 thick each coat). Mask where required.
9042	Silver plate .0002/.0004 thick, Type II, Grade B per QQ-S-365.
9043	Cadmium plate per QQ-P-416, Type II, Class 1. One coat zinc chromate primer per MIL-P-8585, 2 coats of green enamel paint per TT-E-489, Color Number X14050.
9044	Primer with zinc chromate primer per MIL-P-6889. Paint two coats dull black lacquer. Color Chip #37038 (10° max. gloss). Masking required as per drawing.
9045	Identical to 648, except masking required as per drawing.
9046	Passivate per QQ-P-35.
9047	Phosphate coat type "M", Class 2 per MIL-P-16232.
9048	Aluminum conversion coat, Turco #4178-6 per MIL-DTL-5541. Prime with zinc chromate primer per MIL-P-6889. Paint one (1) coat dull black lacquer, Color Chip #37038 (10° max. gloss) per FED-STD-595.
9049 REVB	Cad plate .0002 to .0003 thick and chromate dip, per QQ-P-416, Class 3, Type II. Mask per drawing. One coat zinc chromate primer per MIL-P-6889. Paint olive drab, 24084, per FED-STD-595.
9050 REVA	Iridite, clear, per MIL-DTL-5541, Class 1A.
9051	Aluminum conversion coat per MIL-DTL-5541, Class 3. Prime with 2 coats zinc chromate primer per MIL-P-8585. Paint 2 coats FED-STD-595, Chip #36231, Color Gray per TT-E-527. Mask as required by drawing before priming and painting.

= C	9052	Identical to 9051, except masking required per drawing before priming and painting.
	9053 REVA	Aluminum conversion coat per MIL-DTL-5541, Class 3. Color to be yellow unless otherwise specified.
	9054	Prime with 2 coats zinc chromate primer per MIL-P-8585. Paint 2 coats FED-STD-595, Chip # 36231, color gray per TT-E-527.
	9055 REVA	Mask as required per drawing before priming and epoxy coating. Apply one coat of pretreatment wash primer per DOD-P-15328 and one coat epoxy primer per MIL-P-23377. Apply one coat of epoxy top coat in accordance with MIL-C-22750 and conforming to color chip #36231 of FED-STD-595.
	9056	One coat wash primer per MIL-C-8514 to a dry film thickness of 0.0002 to 0.0003 inches. Prime per MIL-P-7962, 0.0003 to 0.0004 inches thick. 2 coats of Color No. 26307 (FED-STD-595) per MIL-L-19538.
	9057	Wipe metal clean with lacquer thinner, and apply one coat of light gray air dry lacquer per Colonial Lacquer and Chemical Co. L1S-16. Color to be in accordance with color chip in possession of inspection department.
	9058	Tousey 2-1449, beige primer, Tousey 2-1448, beige enamel, FED-STD-595, Chip #23690 per HP Spec. #187-D-130 (Allis-Chalmers).
	9059 REVA	Chemical film per MIL-DTL-5541, Class 1A. Apply 2 coats of primer (0.001 to 0.002 dry film thickness) per MIL-P-8585. Apply 2 coats gray baking enamel per Type III, Class 2, of MIL-E-15090 to be applied as continuous films approx001 thick. Mask as specified on drawing.
	9060 REVA	Aluminum conversion coat (Torco 4178-6) per MIL-DTL-5541, Class 1A, zinc chromate primer per MIL-P-8585, blue baked enamel (Wright Line #001655).
	9061	Identical to 9060, except mask per drawing.
	9062	Obsolete Zinc chromate primer per MIL-P-8585, blue baked enamel (Wright Line #001655).
	9063 9064 REVA	Identical to 9062, except mask per drawing. Aluminum conversion coat (Torco 4178-6) per MIL-DTL-5541, Class 1A. Zinc chromate primer per MIL-P-8585, black semi-gloss baked enamel.
	9065	Identical to 9064, except mask per drawing.
	9066	Zinc chromate primer per MIL-P-8585, black semi-gloss baked enamel.

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9067	6/3/2020, SEE UPDATED LOG PAGE 92 Identical to 9066, except mask per drawing.
9068	Dry film lubricant process per MIL-L-8937.
9069	ASA #49 gray paint.
9070	Black enamel (baking) semi-gloss. Consists of 75% gloss, and 25% semi-gloss as purchased from Colonial Lacquer.
9071	White bake enamel"Waterlac" #2013.
9072	2 coats of lacquer sealer and 1 coat semi-gloss white lacquer.
9073	Selac vinyl baking enamel, green Coritex 63P-L11494.
9074 REVA	Chromate conversion coat per MIL-DTL-5541, Class 1A. Zinc chromate primer per MIL-P-6889. 2 coats light gray semi-gloss baking enamel per MIL-E-15090, Class 2, Type III, Color No. 26307 per FED-STD-595. Masking required as per drawing.
9075	Tin plate .0003 to .0004 thick per MIL-T-10727, Type I.
9076 REVA	Chemical film treatment per MIL-DTL-5541, Type II, Class 2, color iridescent yellow (Turco Accelagold).
9077	Vinyl zinc chromate primer, Navy STD Formula 120 per MIL-P-15930 (one coat), and Navy STD Formula 122-46 gray per MIL-P-16502 (2 coats).
9078 REVA	Nickel plate per QQ-N-290, Class 1, Grade C.
9079	Chemical conversion coat in accordance with Bendix Manufacturing Specification BM-843-2, or equivalent.
9080	Phosphate dip, 1 coat zinc chromate primer, paint dull black enamel, Color No. 37038, FED-STD-595.
9081	Phosphate coat, primer coat per BUWEPS 2801482-02, or 2801482-03. Paint one coat semi-gloss vinyl per BUWEPS 2801429-29, light gray color to match BUSHIPS Color Card Formula No. 111, Class 2, per MIL-E-15090 with application per BUWEPS 2801100.
9082	Same as 9081, except masking required as specified on applicable drawing.
9083 REVA	Chromate conversion coat per MIL-DTL-5541, Class 1A. Prime with zinc chromate primer per MIL-P-8585. Paint 2 coats dull black enamel per TT-E-527. Color No. 37038, FED-STD-595.

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Ŭ	9084	Sand blast outside surfaces only, and black oxide per MIL-C-13924, Class 2.
	9085	Commercial brass plate.
	9086	Passivate per QQ-P-35. 1 coat Devran 201 green, 1 coat Devran 201 buff, and 1 coat Devran 209 black. Celanese Coatings Co., Devoe Marine Division, Newark, NJ 26225.
	9087	Black passivate - no post treatment dip.
	9088	Black passivate, dip in oil, wipe to remove excess.
	9089	Insignia red air dry enamel.
	9090	Phosphate treat per TT-C-490, Grade I (bonderite or equiv.), after which surfaces shall be primed with zinc chromate primer, Type I, in accordance with MIL-P-6889, and finish with blue enamel, Color No. 25189 of FED-STD-595.
	9091 REVB	Mask as required per drawing before priming and epoxy coating. Chromate conversion coat per MIL-DTL-5541, Class 3. Apply one coat of pretreatment wash primer per DOD-P-15328 and one coat epoxy primer per MIL-P-23377. Apply one coat of epoxy top coat in accordance with MIL-C-22750 and conforming to color chip #36231 of FED-STD-595.
	9092	Vibrate tumble approximately 30 minutes using aluminum oxide, Grade "C" media in a solution of 1-1 $1/2\%$ ESBEC #1205 and water.
	9093	Identical to 9090, except masking required as per drawing.
	9094	Finish per Data Sheet 885.
	9095	Finish per Data Sheet 919.
	9096 REVA	Chromate conversion coat per MIL-DTL-5541, Class 1A. Prime with one coat of zinc chromate primer per MIL-P-8585. Two coats of enamel per MIL-E-7729 or MIL-E-5556, Color 27038 per FED-STD-595, bake 3 hours at 225° F (semi-gloss black).
	9097	Identical to 9096, except mask per drawing.
	9098	Prime with black paladim primer #12412. Paint with black semi-gloss enamel, Type ROXYN EK-4542-1, and bake at 250° C for one hour.
	9099	Identical to 9098, except mask per drawing.
	9100	Apply coating per Data Sheet 885. Paint surfaces specified on drawing with one coat of orange-yellow lacquer No. 614, complying with MIL-L-19538 (AER).
	9101	Textured sepia (24091) vinyl organsol (M & T Chemicals).

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### 9102 REV A REPLACED BY 9036.

Note: MIL-P-23236 has obsoleted Type I, Class 1 or 2.

Original Definition: Clean and degrease thoroughly. Phosphate dip per TT-C-490, Type I, or grit blast all over. Paint with epoxy paint complying with MIL-P-23236, Type I, Class 1 or 2 (colorblack). Coating system to be as required to obtain the number of coats, and a dry minimum total thickness as specified by each manufacturer listed in QPL 23236. Masking required as specified on drawing.

9103 Clean, prime and paint per MIL-F-14072, P213Y (forest green). Masking as specified on drawing.

Ohromate dip, prime and paint per MIL-F-14072, P513Y (forest green). Masking required as specified on drawing.

9105 REVA Chromate conversion coat per MIL-DTL-5541, Class 1A. One coat zinc chromate primer per MIL-P-8585, two coats black semi-gloss enamel per TT-E-489, Color 27038 per FED-STD-595, and bake 1 hour at 275° F. Mask as required.

9106 Black paladin primer 12412. Paint with black semi-gloss enamel per TT-E-489, Color 27038 per FED-STD-595, and bake 1 hour at 275° F. Mask as required.

9107 Chromate conversion coat per MIL-DTL-5541, Class 1A (iridite 14.2). Mask as required prior to painting. Wash prime per MIL-P-15328, yellow .0002-.0005 thick dry film inside and outside surfaces.

One coat zinc chromate primer per MIL-P-8585. .0005-.0008 thick dry film (coloryellow) inside and outside surfaces.

One coat .004 thick per MIL-W-5044, Type II, dark grey enamel, Color 36231 per FED-STD-595 (outside surfaces only). Air dry for 8 hour (non-slip walkway finish).

Chromate conversion coat per MIL-DTL-5541 Class 1A (Iridite 14.2). Mask as required prior to painting. Wash prime per MIL-P-15328 yellow .0002-.0005 thk. dry film inside and outside surfaces.

One coat zinc chromate primer per MIL-P-8585 .005 - .0008 thk. dry film (color yellow) inside and outside surfaces.

Two coats lusterless enamel per TT-E-527 dark gull grey color 36231 per FED-STD-595, .001-.002 thk. dry film each coat (outside surface only). Air dry for 8 hours.

9109 Acrylic coating per data sheet #924 (Johnson Wax CDX 77-1).

9110 Same as suffix 9109 except masking required as specified on drawing.

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9108

9111	E6/3/2020, SEE UPDATED LOG PAGE 92 Blue-Gray Wrinkle Enamel #7500-161 Cardinal Ind. finishes 1329 Potrero, South El Monte,
	California.
9112	Brass Plate 70 Cu/30Zn for bonding elastomer (Ref00005 Thk).
9113	Phosphate treat per TT-C-490 (Fed), wash primer per MIL-P-15328 & paint 2 coats light gray enamel per MIL-E-15090 Type III CL2 or Type II CL2.
9114	Passivate; Paint one coat brown primer per TT-P-664; paint 2 coats gray enamel per MIL-E-15130.
9115	Identical to 9114 except masking or other qualifications as specified on drawing.
9116	Clear Epoxy paint per MIL-C-22750.
9117	Phosphate Treat Per TT-C-490, Type II. Wash Prime Per MIL-P-15328 Zinc Chromate Prime Per MIL-P-8585, Spray 2 coats baking enamel per TT-E-489, Class B. Color shall be light Admiralty. Grey conforming to British Standard 381C, Color No. 697. Final Dry Film Thickness, .001 Minimum.
9118	Identical to 9117 except masking required as specified on drawing.
9119	Chromate Dip Per MIL-DTL-5541 Class 1A (Do not dip in caustic).
9120	Identical to 977 except masking required as specified on drawing.
9121 REVA	Chemical film per MIL-DTL-5541, Class 1A, after which surface shall be primed .0002 to .0010 thick with zinc chromate primer per MIL-P-8585. Then painted per MIL-E-15090, Class 2, Type III, gray, semi-gloss enamel, baked. Masking or other specifications as per drawing.
9122	Cancelled.
9123 REVA	Chromate conversion coat per MIL-DTL-5541, Class 1A. Prime with zinc chromate primer per MIL-P-8585. Paint 2 coats dull black enamel per TT-E-527. Color No. 37038 FED-STD-595. (Do not dip in caustic).
9124	Applies to sub-assemblies consisting of components finished prior per 7007. One (1) coat zinc chromate primer per MIL-P-6889, and two (2) coats semi-gloss light gray baking enamel per MIL-E-15090, Type III, Class 2 (masking required per drawing).
9125	Cancelled.
9126	One coat wash primer (pretreatment coating) per MIL-C-8514. One coat zinc chromate primer per MIL-P-8585. Two coats semi-gloss gray enamel (Color No. 26373 of FED-STD-595) applied per MIL-F-18264, mask as per drawing. Enamel to be per TT-E-529, Class B, Comp G.
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- 9127 Paint with light gray semi-gloss air drying paint, Voplex No. 93113657, or Eng. approved equiv. mask as indicated on drawing. 9128 Caustic etch and oven dry per Data Sheet No. 946. 9129 REVA Chromate conversion coat per MIL-DTL-5541, Class 3. Prime with zinc chromate primer per TT-P-1757. Paint 2 coats of dull black enamel per TT-E-527. Color No. 37038 per FED-STD-595. 9130 Armorhide textured plastic finish per Data Sheet 950. 9131 Chromate conversion coat per MIL-DTL-5541, Class 3. Do not dip in caustic. Prime with zinc chromate primer per TT-P-1757. Paint 2 coats of dull black. Enamel per TT-E-527, Color No. 37308 per FED-STD-595. See drawing for masking requirements. 9132 (A) Grit blast to white metal. Immediately after grit blasting, apply Tarset MCR-43 epoxy primer, and allow to air dry (B) for 18 hours minimum. (C) Immediately after primer has dried, apply first finish coat of Tarset black epoxy paint per MIL-P-23236, Type I, Class 1 or Class 2, and allow to air dry for 6 to 8 hours, or until "set to touch". (D) Immediately after first finish coat has "set to touch," apply second finish coat and bake at 150° F for 4 to 6 hours minimum 9133 Same as 9132, except masking required as specified on drawing. 9134 Chromate conversion coat per MIL-DTL-5541, Class 3. Prime per FED Spec. TT-P-1757 (G.E. Specification F31G-WB3) and paint with Color #36231 per FED-STD-595. 9135 One coat of zinc chromate primer per MIL-P-8585, Color Y, and finished with 2 coats of gray enamel per MIL-E-15090, Class 2, Type II. 9136 Alodine 1200, color olive drab to dark straw. 9137 Cadmium plate, Class 1, Type II in accordance with QQ-P-416. Prime with accordance with MIL-P-15328, applied as a continuous film .0002 to .0005 inch thick, or a hot dip tank phosphate treatment conforming to Type I of TT-C-490, followed by one coat of primer in accordance with
  - 9138 Same as 9137, except masking required as specified on drawing.

continuous films approximately .001 inch thick.

TT-P-1757 applied as a continuous film .0005 to .001 inch thick shall be applied to the parts. Finally (2) coats of gray enamel, conforming to Class 2 of MIL-E-15090, shall be applied as

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9139	Prime with zinc chromate primer per TT-P-1757, Color Y. Paint with 2 coats of light gray enamel per MIL-E-15090, Class 2. Mask as required on drawing.
9140	Same as 9080, except masking required as specified on applicable drawing.
9141	Phosphate dip, one coat zinc chromate primer and two coats enamel, lusterless black, Color No. 37038 per FED-STD-595.
9142	Same as 9141, except masking required as specified on applicable drawing.
9143	Chromate conversion coat per MIL-DTL-5541, Class 1A. One coat zinc chromate primer, .00020010 thick per TT-P-1757, Color Y, two coats gray enamel per MIL-E-15090, .001 thick, Class 2, Type III.
9144	Chemical film per MIL-DTL-5541, Class 1A. One coat of wash primer per MIL-C-8507. One coat of zinc chromate primer per TT-P-1757. Two coats of light gray formula III enamel per MIL-E-15090, Type II, Class 2.
9145	Same as 9144, except masking required as specified on applicable drawing.
9146	Phosphate dip, 1 coat zinc chromate primer .0002 to .0010 thick per TT-P-1757. Paint 2 coats gray enamel per MIL-E-15090, Type III, Class 2, .001 min. thick, Color No. 26307 per FED-STD-595.
9147	Same as 9146, except masking as required.
9148	Phosphate dip and acrylic coat per Data Sheet #924 (Johnson Wax CDX 77-1).
9149 REVA	Chemical film per MIL-DTL-5541, Class 1A. Prime with one coat of primer per MIL-P-23377. Paint with one coat of light gray semi-gloss epoxy polyamide per MIL-C-22750, Class 2, FED-STD-595, Color No. 26307, 0.0254-0.0381 (mm) thick. Masking as required per drawing.
9150	Applies to sub-assemblies using components previously finished per Suffix 7007 or 920. Apply wash primer per MIL-P-15328 as a continuous film .0002 to .0005 thick followed by one (1) coat of zinc chromate primer per MIL-P-8585 applied as a continuous film .0005 to .0010 thick. Apply two (2) coats of gray enamel per MIL-E-15090, Class 2, applied as continuous films. Approximately .001 thick. Masking required as specified on drawing.
9151	Passivate per MIL-STD-171, Finish #5.4. Apply wash primer per MIL-P-15328 as a continuous film .0002 to .0005 thick followed by one (1) coat of zinc chromate primer per MIL-P-8585

applied as a continuous film .0005 to .0010 thick. Apply two (2) coats of gray enamel per MIL-

E-15090, Class 2 applied as continuous films, approximately .001 thick. Masking required as specified on drawing.

- Light gray semi-gloss air drying paint, Voplex No. 93113657, or engineering approved equivalent. Masking required, if specified on drawing.
- 9153 REVB Chromate dip per MIL-DTL-5541, Class 1A. Epoxy primer per MIL-PRF-23377, thickness .0007 max. Paint with epoxy enamel per MIL-PRF-22750, Color No. 26555 (beige) per AMS-STD-595 thickness .0017 max. Masking required as specified on drawing.
- 9154 Reserved by RFS 5/28/75, FCR Dwg. 7210018.
- Ohromate conversion coat per MIL-DTL-5541, Class 1A. One coat zinc chromate primer per TT-P-1757, Color Y. Two coats light gray semi-gloss air drying enamel per MIL-E-15090, Class 2, Type II. Mask as required per drawing.
- 9156 Black nitrate on stainless steel.
- Prepare and coat metal surfaces per Paragraphs I and II of Data Sheet 975.
- Phosphate treat per TT-C-490, Type I. Apply wash primer per MIL-P-15328 followed by one (1) coat zinc chromate primer per MIL-P-8585, and two (2) coats gray enamel per MIL-E-15090, Class 2. Masking required as specified on drawing.
- 9159 Reserved by FCB.
- 9160 Electropolish per Western Div., Specification F102-144, Class 4.
- Phosphate per TT-C-490, Type I. Prime with zinc chromate primer per TT-P-1757, Color Y. Final film to be light gray semi-gloss enamel per TT-E-529, Color 26373 per FED-STD-595, 2 coats.
- Same as 9161, except mask as required by drawing.
- Phosphate per TT-C-490, Type I. Prime with zinc chromate primer per TT-P-1757, Color Y. Final film to be light gray semi-gloss enamel per TT-E-529, Color 26440 per FED-STD-595, 2 coats.
- Same as 9163, except mask as required by drawing.
- 9165 Epoxy coating per Barry Data Sheet 983.

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9166	Cadmium plate all surfaces, Class 2, Type II, per BPSFW4436 (.000300049 thick) (Bell
	Helicopter Spec.).
9167	Degrease using perchlorethylene. Spray one coat of Chemlok 205 adhesive following Chemlok Procedure 2020H. Air dry for ten minutes, and spray with one coat of Chemlok 222 adhesive, following Chemlok Procedure 2041.
9168	Chemical film per Bell Process Sheet FW 4182 (similar to Barry 920).
9169	Primer per Vendor P/N 648, and paint with woolsey catalyzed epoxy enamel, (dover gray) Vendor P/N 458. Use with reducer, Vendor P/N 442.  VENDOR: Harry Miller Co.  540 E Street, South Boston, MA 02210
9170	One coat of primer, 0.0005 to 0.002 inch film thickness per TT-P-664. Paint two coats of gray enamel (Formula No. 111) per MIL-E-15090, Type III, Class 2, as continuous film each approximately 0.001 inch thick.
9171	Prime with one coat of zinc chromate primer .3 to .8 mil thick (dry film) per TT-P-1757 composition G, Color Y. Paint with two coats of light gray enamel (Formula III) per MIL-E-15090. Each coat to be approximately 1.0 MIL thick. Enamel Type III, Class 2, baked 30 minutes at 250° F.
9172	Clean with a deoxidizing solution other than caustic dip, and then anodize per MIL-A-8625, sulphuric acid process with a clear water seal. Prime with one coat of zinc chromate primer .3 to .8 MIL thick (dry film) per TT-P-1757 composition G, Color Y. Paint with two coats of light gray enamel (Formula III) per MIL-E-15090. Each coat to be approximately 1.0 MIL thick. Enamel Type III, Class 2, baked 30 minutes at 250° F. Masking required as specified on drawing.
9173	Clean with a deoxidizing solution other than caustic dip, and then anodize per MIL-A-8625, Type II using a clear water seal.
9174	Phosphate treated per TT-C-490, Type I (bonderize or equivalent), after which surface shall be primed with zinc chromate primer, Type I in accordance with the latest version of MIL-P-8585, and finished with black enamel per MIL-E-15090, Class 2.
9175	Same as 9174, except masking required as specified on drawing.
9176	Passivate per QQ-P-35, Type II.

fectivity Da 9177	Applies to sub-assemblies using components previously finished per Suffix 808 or 601. Apply
7111	wash primer per MIL-P-15328, as a continuous film .0002 to .0005 thick, followed by one (1) coat of zinc chromate primer per MIL-P-8585 applied as a continuous film .0002 to .0010 thick.
	Apply two (2) coats of gray enamel per MIL-E-15090, Class 2 applied as continuous films
	approximately .001 thick. Masking required as specified on drawing.
9178	Same as 871, except paint to be light gray baking enamel per MIL-E-15090, Class 2, Type III, color light gray, per FED-STD-595, Color No. 26307.
9179	Phosphate treated per TT-C-490, Type I (bonderize or equivalent), after which surface shall be
	primed with zinc chromate primer, Type I in accordance with the latest version of MIL-P-8585, and finished with black enamel per FED-STD-595, Color No. 27038.
9180	Same as 9179, except masking required as specified on dwg.
9181	a. Hot dip phosphate treat per TT-C-490, Type I.
	b. Prime with one coat of zinc chromate primer .3 to .8 mils thick (dry film) per TT-P-1757, Comp. G, Color Y.
	c. Paint with two coats of light grey enamel (Formula #111) per MIL- E-15090, Type
	II, Class 2, approx. 1.0 mil thick each coat (dry film).
	Masking required as specified on drawing.
9182	One coat primer per MIL-P-15328. One coat primer per TT-P-1757. Two coats light gray enamel per MIL-E-15090, Type III, Class 2, or Type II, Class 2.
9183	Same as 9182, except masking as specified on drawing.
9184	Hard anodize per MIL-A-8625, Type III, Class 1, .001 to .002 thick.
9185	Same as 9181, except no masking required.
9186	Phosphate treat per TT-C-490, Type II. One coat primer per TT-P-1757, applied as a continuous
	film .002 to .001 inch thick. Paint two coats light grey enamel per MIL-E-15090, Class 2, applied
	as a continuous film approx001 inch thick.
9187	Same as 9186, except mask as specified on drawing.
9188	Zinc plate per ASTM B633, Class FE/ZN12, Type II. Prime per MIL-P-15328, applied as a
	continuous film 0.0002 to 0.0005 inch thick, or a hot dip-tank phosphate treatment conforming to Type I of FED Spec. TT-C-490. Follow by one (1) coat of primer per MIL-P-8585 applied as a
	Type For FED Spec. FF-C-490. Follow by one (1) coat of printer per wite-1-0303 applied as a

continuous film 0.0002 to 0.001 inch thick.

Then, (2) two coats of gray enamel, conforming to Class 2 per MIL-E-15090 shall be applied as continuous films approx. 0.001 inch thick.

- 9189 Finish per Barry Data Sheet 1054.
- Finish per Barry Data Sheet 1054, and paint the outside of the flanges of Item 2, with one coat of orange-yellow Lacquer No. 614 complying with MIL-L-19538 (AER).
- 9191 REVA Iridite #14-2 per MIL-DTL-5541, Class 1A. Wash prime per MIL-P-15328 .0002-.0005 dry film thickness. Apply one coat of zinc chromate primer per TT-P-1757, .0005-.0008 dry film thickness (color-yellow). Apply two coats of lusterless enamel per TT-E-527, dark dull grey, Color No. 36231, per MIL-STD-595, .001-.002 dry film thickness each coat. Air dry for 8 hours.
- Finish rubber parts per Barry Data Sheet 1054.

Epoxy paint metal parts per MIL-P-23236, Type I, Class 1, or Class 2 (color-black).

- a. Wipe steel surfaces clean of grease and oil with a clean rag wet with solvent.
- b. Sandblast steel surfaces.
- c. Paint the steel surfaces with coating system as required to obtain the number of coats, and a dry minimum total thickness, as specified by each manufacturer listed in the Qualified Products List (QPL 23236).
- Prime with zinc chromate primer per TT-P-1757, Color Y. Apply 2 coats of light gray enamel per MIL-E-15090, Class 2, Type III.
- Prime surfaces with epoxy polyamide per MIL-P-23377. Apply finish coat of white polyurethane paint per MIL-C-83286, Color 27875 per FED-STD-595. Finish 9195 previously required.
- 9195 Surface treatment alodine 1200 per MIL-C-81706, Class 1A.
- Phosphate dip; prime surfaces with epoxy polyamide per MIL-P-23377. Apply finish coat of white polyurethane paint per MIL-C-83286, Color 27875 per FED-STD-595.
- Prime surfaces with one coat epoxy polyamide per MIL-P-23377. Finish 901 previously required. Mask per drawing.
- Prime surfaces with two (2) coats of epoxy polyamide per MIL-P-23377. Finish 920 previously required. Mask per drawing.
- For inside of ferrous tubes: Clean in accordance with Paragraph 3.5.3 of MIL-E-4158. Finish per MIL-F-14072, Finish No. P215J, Steps 1 & 4.

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9200	Clean in accordance with Paragraph 3.5.3 of MIL-E-4158. Recondition and prime per MIL-F-14072, Finish No. P213, Steps 1 & 3. Final paint film F1 in accordance with MIL-F-14072, one coat gray semi-gloss enamel, Color No. 26250, per FED-STD-595.
9201	Same as finish 9200, except mask as necessary.
9202 REVC	Lockhead Martin Cup Paint (23217-All). Caustic etch, chromate conversion per MIL-DTL-5541, Class 1A. One coat of high solids primer per MIL-PRF-23377. Type 1, Class C2, one coat of polyurethane coating per MIL-PRF-85285, Type 1, Class H, Color 17925, white.
9203 REVA	Passivate per QQ-P-35. Prime with zinc chromate primer per MIL-P-8585. Paint 1 coat dull black enamel per TT-E-527. Color No. 37038, FED-STD-595.
9204	Zinc chromate primer per MIL-P-8585. Dull black lacquer per TT-L-20, Color No. 37038, painting to conform to MIL-F-7179 and MIL-F-18264. Masking as required per drawing.
9205	Bell procurement Spec. 4451, Rev. B, "Application of Polyamide Eopxy Primer".
9206	Aluminum conversion coat per MIL-DTL-5541, Class 1A. One coat zinc chromate primer per MIL-P-8585. Paint with two coats engine gray lacquer, Fed. Std. 595, Color No. 16081, per Fed. Spec. TT-L-32.
9207	Superseded by Suffix 8022.
9208	Epoxy Primer Class 2, .0005 to .0008 thick per MIL-P-23377, followed by polyurethane coating .0015 to .00225 thick per MIL-C-81773, Color No. 26270 per FED-STD-595. (Mask per drawing).
9209	Zinc phosphate coat per MIL-P-16232, Type Z, Class 2.
9210	Grit blast or wheel abrade. One coat wash primer per MIL-C-8507. One coat zinc chromate primer per TT-P-1757. Two coats of light gray formula III enamel per MIL-E-15090, Type II, Class 2. Masking required as specified on applicable drawing.
9211	Prime surfaces with epoxy polyamide per MIL-P-23377. Apply finish coat of black polyurethane coating per MIL-C-83286, Color 27038 per FED-STD-595. Finish 9195 previously required.
9212	Coarse grit sand blast or equal, and passivate per QQ-P-35. Prime with one coat zinc chromate primer per TT-P-1757. Paint one coat of smooth lusterless (olive drab) green color per TT-E-527 conforming to Color Chip Number 34087 of FED-STD-595. Masking required as specified on drawing.

- 9213 REVA Conversion coat per MIL-DTL-5541, Class 1A. Prime with one coat zinc chromate primer per TT-P-1757. Paint one coat of smooth lusterless (olive-drab) green enamel per TT-E-527, conforming to Color Chip No. 34087 of FED-STD-595. 9214 Finish per MIL-T-704, Type A, final coat, Color No. 23, semi-gloss, Marine Corps. green per TT-E-485 and FED-STD-595, as follows: (1) Clean to remove all oil and grease. (2) Zinc phosphate per TT-C-490, Type I. (3) Prime with 1 coat Marine Corps. green enamel, Color No. 23, semi-gloss, 1.0 to 1.5 MILS thick dry film, per TT-E-485. Apply a second coat as final film per Paragraph 3 above. (4) 9215 Same as 9214, except mask as specified on drawing after completing Steps 1 and 2. 9216 Phosphate per TT-C-490, Type I. Paint with 1 coat blue enamel, Color No. 35240 per FED-STD-595. Mask as specified on drawing. 9217 REVA Wash prime per MIL-P-15328. Zinc chromate prime per MIL-P-8585. Paint with two coats of semi-gloss enamel per Fed. Spec. TT-E-529, Class B, Color No. 24084 per FED-STD-595. Masking or other qualifications on drawing. 9218 REVA Chemical film per MIL-DTL-5541, Class 1A. Pretreat per MIL-P-15328. Prime one coat primer per MIL-P-23377. Paint with light gray semi-gloss epoxy polyamide per MIL-C-22750, FED-STD-595, Color No. 26307, 0.0254-0.0381 (mm) thick. Masking required as specified on drawing. 9219 Bell Process Spec. 4182 (Rev. E). 9220 Chemical film treatment per Bell Process Spec. 4182. Apply one coat 299-947-060 primer per
  - B.P.S. 4325 to all exterior surfaces with two coats P-95 acrylic lacquer per B.P.S. 4386, color to be light gull gray No. 36440 per FED-STD-595.
  - 9221 Apply one coat of 299-947-060 primer per B.P.S. 4325 to all exterior surfaces (unless otherwise noted) with two coats of P-95 acrylic lacquer per B.P.S. 4386. Color to be light gull gray No. 36440 per FED-STD-595.
  - 9222 Hot dip tank phosphate treatment per Type I of TT-C-490, followed by one coat of primer per MIL-P-8585, applied as a continuous film .0002 thick. Then (2) coats of gray enamel per MIL-E-15090, Class 2, applied as continuous films approx. .001 thick.
  - 9223 Same as 9222, except masking as called out on drawing.
  - 9224 Black adhesive with clear acrylic coating per Data Sheet No. 924.

Apply coating per Data Sheet 1054. Epoxy paint per MIL-P-23236, Type I, Class 1, or 9225 Class 2 (color-black) exposed steel surfaces as follows: Wipe steel surfaces clean of grease and oil with a clean rag, wet with solvent. A. B. Sandblast steel surfaces. C. Paint the steel surfaces with coating system, as required, to obtain the number of coats, and a dry minimum total thickness as specified by each manufacturer listed in the Qualified Products List (QPL 23236). 9226 A. Hot dip phosphate treat per TT-C-490, Type I. В. One coat primer 0.8 mils (min.) thick (dry film) per TT-P-636. C. One coat green paint per TT-E-529, Color No. 24533 per FED-STD-595. 0.0254-0.0381 MM (.001 - .0015 mils) thick dry film. Masking required as specified on drawing. D. 9227 Oil resistant coating per Data Sheet 915. 9228 REV B Passivate per AMS2700, Types 2 or 6 (Superceded QQ-P-35, Types I, II, III OR VI). 9229 Phosphate dip per TT-C-490, Type I, and prime with zinc chromate primer per TT-P-1757, Color Y. 9230 Organic pretreatment coating per TT-C-490, Type III. Aluminum conversion coating (clear) per MIL-DTL-5541, Class 3. 9231 9232 Finish per Barry Data Sheet 1163. 9233 Electropolish per Barry Spec. F102-144, Type IV. Silver plate per QQ-S-365A, Type III, Grade A, only the surfaces specified on the drawing. 9234 Chromate conversion coating per Data Sheet 988. One coat of epoxy primer per B.P.S. FW 4451. 9235 1) Aluminum conversion coat per MIL-DTL-5541, Class 1A. 2) Prime one coat primer per MIL-P-23377. 3) Paint one coat gray lusterless enamel per MIL-C-83286. Color to be No. 36251 per FED-STD-595.

9236

4)

if specified on drawing.

Hard anodize .002 thick per MIL-A-8625, Type III, Class 2, color-flat black. Masking required,

Mask as called for on drawing.

- 9237 REVA Chemical film per MIL-DTL-5541, Class 1A. Paint outside gray lacquer per MIL-L-7178.
- 9238 Black lusterless paint. Masking as required per drawing.
- Degrease and coat with sage green polyster coating powder to a nominal thickness of 2 mils. Threads to be free of coating. (Applied by Technical Powder Coating, RD #3, Old Denver Road, Denver, PA 17517).
- A) Aluminum conversion coat per MIL-DTL-5541, Class 1A.
  - B) Prime one coat primer per MIL-P-23377.
  - C) Mask as specified on drawing.
- Zinc chromate primer per MIL-P-8585, Color Y. Paint 2 coats dull black enamel per TT-E-527,Color No. 37038 per FED-STD-595. Masking, if required per drawing.
- 9242 Black semi-gloss enamel, Color No. 27038 per FED-STD-595.
- 9243 Black oxide per MIL-C-13924, Class 4.
- 9244 P513-2 of MIL-F-14072 as follows:
  - (1) Aluminum conversion coat per MIL-DTL-5541, Class 1A.
  - (2) Pretreatment coating per MIL-P-15328.
  - (3) Prime with one coat of zinc chromate primer per TT-P-1757.
  - (4) One coat green paint per TT-E-529, Color No. 24533 per FED-STD-595, 0.0254 0.0381 MM (.001 .0015 mils) thick dry film.
- 9245 Black oxide per MIL-C-13924, Class 1.
- 9246 REVA Dark green semi-gloss enamel, Color No. 24084 per FED-STD-595.
- 9247 REVA Finish per MIL-T-704, Type A. Final coat lusterless enamel, forest green per MIL-E-52798, Type II.
  - (1) Clean to remove all oil and grease.
  - (2) Zinc phosphate per TT-C-490, Type I.
  - (3) Prime with one coat forest green lusterless enamel, 1.0 to 1.5 mils thick dry film per TT-E-527.
  - (4) Apply second coat as final film per Paragraph 3 above.

Mask as specified on drawings, after completing Steps 1 and 2.

Phosphate per TT-C-490. Prime and paint with primer and synthetic resin supplied by customer. Air dry only at least 24 hours. Protect from contamination during air dry.

- 9249 Same as 871, except phosphate treat after grit blasting. Masking as required.
- Paint using glossy black enamel (FED-STD-595, Color Chip # 17038). Mask as required per drawing.
- 9251 Finish rubber parts per Barry Data Sheet 915. Epoxy paint metal parts per MIL-P-23236, Type I, Class 1 or Class 2 (color-black).
  - A. Wipe steel surfaces clean of grease and oil with a clean rag, wet with solvent.
  - B. Sandblast steel surfaces.
  - C. Paint the steel surfaces with coating system, as required, to obtain the number of coats, and a dry minimum total thickness as specified by each manufacturer listed in the Qualified Products List (QPL 23236).

CAUTION: Required when mixing or applying per Data Sheet 1155.

- Phosphate dip per TT-C-490. Apply one coat of primer per TT-P-1757. Apply two coats dark blue semi-gloss enamel (FED-STD-595, Color Chip No. 25053). Mask threads.
- Prepare and prime with finish P210-1 of MIL-F-14072: Reconditioning: Sanding or abrasion or phosphoric acid etch per MIL-C-15078; Pretreatment per MIL-P-15328;

Prime per MIL-P-23377;

Final paint film: forest green, urethane;

Paint per MIL-C-46168. Film thickness shall be .001 to .0015.

- 9254 Sand, abrade or phosphoric acid etch per MIL-C-10578. Pre-prime per MIL-P-15328. Prime per TT-P-1757, .004 .006 thick. Final film, Gray #26152 per FED-STD-595, semi-gloss enamel per TT-E-529, .0010 .0015 thick.
- 9255 Electropolish per Western Division Specification F102-144, Class III.
- Ocat specified area with Karon RP BV Kamatics. Thickness to be .009 .013 per side. Wear material to be in accordance with MIL-B-8943. Other surfaces to be anodized per MIL-A-8625, Type II, Class 1.
- 9257 Specified surface to be hard anodized to MIL-A-8625, Type III, .002 inches & Teflon impregnated. Mask other surfaces then iridite per MIL-DTL-5541, Class 1A (no caustic).
- One coat phosphate treatment per TT-C-490, Type I. One coat of zinc chromate primer .0004 to .0006 thick (dry film) per TT-P-1757. Paint with one coat of semi-gloss enamel per TT-E-529, Color Chip 26293 per FED-STD-595. Total thickness of paint and primer .005 max.

9259	6/3/2020, SEE UPDATED LOG PAGE 92 Finish for GCA Serva Benches (Reserv. by HVH 3/12/82).
9260	Passivate per MIL-STD-171 (MR) Finish No. 5.4.1 (BS 901). Apply Lub-Lok 5306 to threads per F65A GL1 (MIL-L-8937).
9261	Aluminum conversion coat per MIL-DTL-5541, CL 1A. 2 coats yellow zinc chromate primer per TT-P-1757. 1 coat medium gray enamel per TT-E-529, Color No. 26231 of FED-STD-595.
9262	Phosphate treat per TT-C-490, Type I or grit blast. Prime with zinc chromate primer per TT-P-1757, Color Y and finish with light gray enamel per MIL-E-15090, Class 2. (2 coats of enamel). Color No. 26307 per FED-STD-595.
9263	Zinc chromate primer, Color Y (yellow primer) composition L per TT-P-1757, apply per MIL-P-6808. Paint per TT-E-529, Type I, Color No. 24533 (light green) per FED-STD-595.
9264 REVA	Metal pretreatment coating per MIL-C-8514. Wash primer per MIL-C-8507 followed by epoxy polyamide primer per MIL-P-85582, Type I and finish coat of polyurethane per MIL-C-85285. Color No. 26270 per FED-STD-595 applied per MIL-F-18264.
9265	One coat epoxy polyamide primer per MIL-P-23377, Class 1 or 2. Followed by two coats of aliphatic polyurethane coating per MIL-C-46168, Color-flat olive drab, applied in accordance with MIL-F-18264. Masking as required on drawing.
9266	One coat epoxy polyamide primer per MIL-P-23377, Class 1 or 2. Followed by two coats of aliphatic isocyanate urethane coating per MIL-C-83286, Type I, Color gray No. 26307 per FED-STD-595. Masking as required on drawing
9267	Zinc chromate primer, Composition G, Color Y, .00040006 thick dry film, in accordance with TT-P-1757. Paint with two coats of enamel, alkyd, semi-gloss, .00030012 thick dry film. Class A (air drying) per TT-E-529, color-green matching Color Chip 24410 of FED-STD-595. Masking as required per drawing.
9268	Passivate by immersing in a 50% (by volume) nitric acid solution for 15 mins. Rinse and dry after passivation.
9269	Passivate per MIL-STD-171 (ORD) Finish No. 5.4, after which threads to be silver plated per AMS 2411, 0.0003 - 0.0006 thick, other areas optional.
9270	Finish shall be applied by a Sikorsky Aircraft approved source for special processes and laboratories per Sikorsky Specification SS 8486.

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9271	Passivate per QQ-P-35 in accordance with Martin Marietta Specification EDS 30184, and to be applied by Martin Marietta approved sources only.						
9272	Zinc phosphate per TT-C-490, Type I. 1 coat epoxy primer per MIL-P-52192, film thick .80 MIL-1.20 mil. 2 coats forest green enamel per MIL-E-52929, film thick .90 mil min. per coat.						
9273	One coat zinc chromate primer per MIL-P-8585. Two coats black semi-gloss enamel per TT-E-489, Color 27038 per FED-STD-595, and bake 1 hour at 275° F. Mask as required on drawing.						
9274	Zinc chromate primer per MIL-P-6889. Lusterless gray paint, Color No. 36231 per FED-STD-595. Marking per drawing.						
9275	Passivate per QQ-P-35, Type III.						
9276	Finish per Barry Data Sheet 1398.						
9277	See Barry Data Sheet 1407, Paint No. 053711-6015025-203 (dark blue).						
9278 REVA	Chemical film per MIL-DTL-5541, Class 1A. Paint black polyurethane coating per MIL-C-83286. Color Number 27038 per FED-STD-595.						
9279	Prime IAW MIL-P-53022. Paint IAW MIL-C-46168, Type II, Color 34094, Green 383, IAW FED-STD-595.						
9280	See Barry Data Sheet 1407, Paint No. 053711-6015025-201 (light blue).						
9281 REVA	Aluminum conversion coating per MIL-DTL-5541, Class 1A and then apply one coat of primer (conforming to TT-P-1757, Composition L, Color Y) .00060008 thick dry film, followed by two coats of light gray enamel (conforming to MIL-E-15090, Class 2, Type III) approximately .001 thick dry film per MIL-E-16400.						
9282 REVA	Electroless nickel plated in accordance with MIL-C-26074, Class 4, Grade A or equivalent per AMS2404.						
9283	Phosphate treat per TT-C-490, Type I or grit blast; Class 1A. Apply primer per MIL-P-53030 water reducible epoxy: 1.0 mils minimum dry film thickness.						
9284 REVA	Chemical film, chromate per MIL-DTL-5541, Class 1A. Prime (.00040006) per MIL-P-8585, Color Y. Apply two coats (.00090012 each) per TT-E-529 CL B, Color No. 24084 per FED-STD-595. Requirement of Sec. 6, MIL-STD-171 shall apply.						

9285 Passivate per Bell Process Sheet FW4007 or MIL-S-5002.

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9286	Black oxide per MIL-C-13924, Class 3.
9287	Caustic etch; one coat primer per MIL-P-23377. Masking required when specified on drawing.
9288	Clean and degrease thoroughly; prime with zinc chromate. Spray with cloud white epoxy paint, one coat. Bake for 15 min. at 300° F.
9289 REVA	Chemical film per MIL-DTL-5541, Class 1A. Grey lacquer exterior per TT-L-32.
9290 REVA	Pretreat, prime and paint per MIL-DTL-14072 finish P211.1 color AG. Total final finish thickness .004 inch to .006 inch.
9291	See Barry Data Sheet 1451, paint 053711-6020644-201 (light blue).
9292	Abrasive clean per TT-C-490, Method 1. Apply one coat of MIL-P-23377 primer, and two coats MIL-C-83286 polyurethane per MIL-F-18264. Top coat shall be Color No. 15045, strata blue, per FED-STD-595. Do not abrasive clean or paint the rubber.
9293 REVA	Step 1: Anodize per MIL-A-8625, Type II. Step 2: Apply one coat of primer per MIL-P-85582, Type I (Mask as required per drawing). Certification per Hamilton Standard H.S. 3197 required.
9294	Passivate per QQ-P-35. Apply one coat of primer per MIL-P-23377, Type II. (Mask as required per drawing).
9295	Black anodize per MIL-A-8625, Type I, Class 2. Plating thickness to be .0002 to .0003.
9296 REVA	Electroless nickel plated in accordance with MIL-C-26074, Class 4 or AMS2404. Plating to be .0004 to .0005 thick.
9297	Tin plate per MIL-T-10727, Type I, $.0002 \pm .00005$ thick.
9298	Prime surfaces with epoxy polyamide per MIL-P-23377, Type I. Apply finish coat of gloss white polyurethane coating per MIL-C-83286, Type I, Color 17925 per FED-STD-595.
9299	Prime with one coat of zinc chromate primer per TT-P-1757. Apply one coat of lusterless olive green enamel per TT-E-527, Color #34097 per FED-STD-595.
9300	Chemical conversion coating per MIL-DTL-5541, Class 1A. Apply finish per MIL-F-14072, Type I, Finish No. P510.2. Apply one coat of epoxy polyamide primer per MIL-P-23377, Class 1 to a dry film thickness of .0006 to .0009. Apply two coats of alkyd lusterless enamel per FED.

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Spec. TT-E-527. Each coat .001 thick minimum, color-blue gray, No. 36231 per FED-STD-595. Masking as required per drawing.

Phosphate treat per TT-C-490, Type I or grit blast, Class 1A. Apply primer per MIL-P-53030, water reducible epoxy: 1.0 mils min. dry film thickness.

Paint with high solids, polyurethane (voc. content less than 3.5 pounds per gallon).

Color: gray, semi-gloss, fine texture No. 26293 per FED-STD-595. 1.0 mil dry film

thicknes
Approved Paint Manufacturers:

Cardinal Industrial Finishes, San Jose, CA,

Tel.: (408) 292-6732.

Sherwin Williams, Chicago, IL, Tel.: (800) 621-2805.

Zinc chromate primer per MIL-P-6889. Paint with high solids, polyurethane (voc. content less than 3.5 pounds per gallon). Color: gray, semi-gloss, fine texture No. 26293 per FED-STD-595. 1.0 mil dry film thickness.

Approved Paint Manufacturers: Cardinal Industrial Finishes, San Jose, CA,

Tel.: (408) 292-6732.

Sherwin Williams, Chicago, IL,

Tel.: (800) 621-2805.

9303 REVA Clean and passivate per MIL-S-5002, QQ-P-35, AMS-QQ-P-35, ASTM A967 OR AMS2700.

Paint Sherwin Williams Quick Dry Enamel, F77XXB1975-5267. Meets 96 hr. salt spray requirement per ASTM B117 (ref. Barry Report # 1247).
 Note: This finish meets FMTV requirements per US Army Drawing 12420325, Method 7.

- 9305 REVA 1. Clean assembly thoroughly prior to paint(do not passivate).
  - 2. Mask as indicated on drawing.
  - 3. Apply one coat of primer per MIL-P-23377, Type II.
- Phosphate treat per TT-C-490, Type I. 1 coat of primer IAW TT-P-1757 to be applied as a continuous film .0002 to .001 thick. Paint with 2 coats of grey enamel per MIL-E-15090, Class 2. Each coat to be applied as a continuous film approximately .001" thick.
- Conversion coat per MIL-DTL-5541, Class 1A. One coat of zinc chromate primer per MIL-P-6889. Paint with two coats of gray enamel paint per MIL-E-15090, Class 2. Each coat to be applied as a continuous film approximately .001 thick.
- One coat primer per MIL-P-15328; one coat primer per TT-P-1757, and two coats light gray enamel per MIL-E-15090, Type III, Class 2 or Type II, Class 2. Masking or other qualifications as per drawing.

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9309	See Barry Data Sheet No. 1514.
9310 REVB	Electroless nickel plate, .00020003 thick per AMS2404.
9311	Hard anodize, 0.002 thick per MIL-A-8625, Type III. Prime with one coat of zinc chromate primer per TT-P-1757. Paint with one coat of blue enamel per TT-E-527, Color 35109.
9312	Paint thurmalux, Type 270, low sheen black.
9313	Same as 9036, except paint thickness to be .001 to .003 thick.
9314 REVA	One coat epoxy primer per MIL-P-23377, Type I. One coat gray epoxy enamel per MIL-C-22750, Color #36231 per FED-STD-595. Mask as required per drawing.
9315	Nickel plate per AMS 2424, .00020005 thick.
9316	"Clean assembled part using room temperature, acidic based cleaning solutions <u>only</u> . Alkalai cleaners or temperature elevation during cleaning is <u>not</u> allowed. Rinse thoroughly with water, and bake part, if necessary, to avoid bleeding". Aluminum conversion coat per MIL-DTL-5541, Class 1. Paint per MIL-P-23377, Type I. Apply two coats specified coating per MIL-F-18264, using MIL-C-83286, form kit, Type I, FED-STD-595, Color 37925.
9319 REVB	Electroless nickel plate .0005 minimum thick per MIL-C-26074, Class 1, Grade B, or equivalent per AMS2404, except no relief bake at 375° F per Section 3.4.1 allowed.
9320 REVC	Electroless nickel plate .0015 minimum thick per MIL-C-26074, Class 1, Grade C, or equivalent per AMS2404, except no relief bake at 375° per Section 3.4.1 allowed.
9321	See Barry Data Sheet No. 1569. Sherman Williams Buehler White Catalyst 6-1 ratio V-66-V-67.
9322 REVB	Paint per MIS-20007(Latest Revision) Type I, Condition B, Grade 2 except paint thickness check on interior holes and cutouts in rail not required. Per MIS-20007, drawing dimensions apply before paint. Painting must be performed by MIS-20007 approved supplier as MIS-20007 is a restricted document and can not be distributed by Barry Controls. Latest Revision status of MIS-20007 shall be Provided with Purchase Order.
9323	Chemical conversion coating per MIL-DTL-5541, Class 1A. Paint per TT-E-527, Color 36231 per FED-STD-595. Mask as required on drawing.
9324	Prime per MIL-P-23377, Type I. Apply two coats specified coating per MIL-F-18264 using MIL-C-83286, form kit, Type I, FED-STD-595, Color 37925. Masking as required on drawing.
9325	Passivate per QQ-P-35, Type I.
9326 REVA	Clean and passivate in accordance with latest revision of ASTM A380.

- 9327 Grit blast, treat with zinc phosphate per TT-C-490. Prime with zinc chromate primer per TT-P-1757, Color Y. Finish with light gray enamel per MIL-E-15090, Type II, Class 2 (2 coats).
- 9328 REVA Passivate per MIL-STD-171, finish 5.4.1, then electroless nickel plate .0005 .0007 thick per MIL-C-26074, Class 1, Grade B or equivalent per AMS2404.
- 9329 a) Clean per MIL-T-704 or equivalent.
  - b) Primer per MIL-M-53022 (.0152 .0229 MM) (.0006 .0009 inches) thick.
  - c) Final finish per MIL-C-46168 (ME) or MIL-C-53039 (ME), Type II, green 383. Final finish is applied at a minimum of .0457 MM (.0018 inches). Dry in two coats. The total final finish thickness must not exceed .063 MM (.0025 inches). Air cure for 24 hours or bake at 180°F for one (1) hour.
- 9330 Wash prime IAW DOD-P-15328. Apply zinc chromate primer to metal surfaces IAW TT-P-1757, TY OPT, Color Y. Coat threads with castor oil IAW MIL-C-1517.
- Prior to painting, apply one coat of pretreatment coating per DOD-P-15328 .0004 to .0006 mils thickness.
  - b) Paint three coats of epoxy polymide paint in accordance with MIL-P-24441 in the following order:
    - 1. Prime: 3 to 4 mils coat of Formula 150 per MIL-P- 24441/1.
    - 2. Second coat: 3 to 4 mils coat of Formula 155 per MIL-P-24441/6.
    - 3. Top coat: 2 to 3 mils coat of Formula 151 per MIL-P-24441/2. Total dry film thickness shall be 7 to 9 mils minimum.
- Coarse grit sand blast or equal and passivate per MIL-F-14072, finish Number E300.
- Passivate per QQ-P-35, then apply one coat of primer per MIL-P-23377, and two coats of enamel per MIL-C-22750, Color No. 36231 of FED-STD-595. Mask as indicated on the drawing.
- Passivate per QQ-P-35, Type IV. Prime with one (1) coat (.0005 to .001 thick) of zinc chromate primer per TT-P-1757, Color Y and finish with two (2) coats of gray enamel, conforming to Class 2 of MIL-E-15090, shall be applied as a continuous film, approximately .001 inch thick.
- Prime and finish sand yellow, Color No. 23448, per FED-STD-595, in accordance with MIL-T-704, Type A and TT-E-485, Type II.
- Phosphate treat per TT-C-490, Type I. Prime with zinc chromate primer per TT-P-1757, Color Y and finish with light gray enamel per MIL-E-15090, Type II, Class 2 (two coats enamel). Color No. 26307 per FED-STD-595.
- Wash primer per MIL-P-15328. Zinc chromate primer per TT-P-1757. Paint with two coats lusterless black, paint Color No. 37038 per FED-STD-595.

9338	Passivate per QQ-P-35, Type VI or VII.						
9339	Chem. film IAW MIL-DTL-5541. Prime and paint IAW MIL-E-16400, Para. 3.4.11.3.5.						
9340	Prime in accordance with MIL-P-23377. Paint forest green per MIL-C-46168.						
9341	Olive drab cadmium plating, M225 per MIL-F-14072.						
9342	Painted with chemical agent resistant coating (CARC), Finish 20.24.1 per MIL-STD-171, in color green 383.						
9343 REVA	Caustic dip per Barry Finish 909.						
9344	Coarse grit blast entire part, then passivate per QQ-P-35.						
9345	See Barry Data Sheet No. 1677.						
9346 REVA	Electroless nickel plate per MIL-C-26074, Class 2, Grade A or equivalent per AMS2404.						
9347	One coat Zinc Chromate Primer .3 to .6 mils (dry film) thk. per MIL-P-8585.						
9348	Black oxide coating per AMS 2485.						
9349	Two coats epoxy polyamide primer per MIL-P-23377, Type II. Followed by a final paint film of aliphatic polyurethane coating per MIL-C-46168, color olive drab (color 34094, 34097, or 34128 per FED-STD-595). Thinner for primer or topcoat shall be per MIL-T-81772, Type I.						
9350	Paint in accordance with OD 15309 (System 16), light gray and finish with OD 16249, Class III.						
9351 REV A	Paint per WS 19201, Group A, Type IV. Apply two (2) coats of epoxy polyamide paint in accordance with WS19201 D and WI-0405 General Painting Procedure of Products. Apply the coatings in the following order:						

## TYPE IV

1). Primer:

MIL-DTL-24441/29 Formula 150 Green Primer Dry Film Thickness 3 to 8 (0.003 – 0.008 inches)

2). Final Coat:

MIL-DTL-24441/31 Formula 152 White
Dry Film Thickness 3 to 8 mils (0.003 – 0.008 inches)

Note: Total Dry Film Thickness 8 to 24 mils (0.008 – 0.024 inches)

9356

One coat of polysulfide primer per MIL-P-23377 Type 1.

One top coat of polyurethane coating per MIL-C-83286, Type 1 color 17038 or 37038

per FED-STD-595.

9353 REVA Electroless nickel plate per MIL-C-26074 Class 1, Grade A or equivalent per AMS2404.

9354 Finish:

Clean: IAW TT-C-490 Method Optional.

Pretreat: IAW TT-C-490, Type I, Class Optional or type III.

Prime: IAW MIL-STD-193, Option: Prime IAW MIL-P-53084 (Dry Film Thickness

.023 - .035mm) or GM9984017 or GM9984070.

Topcoat: IAW MIL-C-46168 or MIL-C-53039 Color #383 green IAW

FED-TD-595 Dry film thickness IAW MIL-STD-193

Chemical film per MIL-DTL-5541 class 3, color yellow, prime surface per TT-P-1757 finish light

gray enamel per MIL-E-15090 Class II one coat.

A). Hard Anodic coat IAW MIL-A-8625 TYPE III, color clear. (.0003 minimum thickness) <u>EXCEPT</u> for surfaces indicated on drawing. Seal with boiling deionized water.

B). Chromate conversion coat IAW MIL-DTL-5541, Class 3 on all remaining surfaces including holes and threads.

Note: Sequence of coating is optional.

9357 Impregnated per MIL-STD-276 Method B using impregnates per MIL-I-17563 Class 1.

9358 Treat per MIL-DTL-5541 Class 1A followed by primer coating, epoxy per MIL-P-23377, 1.0

mils min. dry film thickness and finish coat, epoxy per MIL-C-22750 color No. 34088 per

FED-STD-5958 1.0 Mils min. dry film thickness.

9359 REVB Clean part in a bath of 20% nitric acid and 3% hydrofluoric acid at a temperature of

125° F followed by a clear water rinse.

9360 REV F After all machining and welding operations are completed, rust or other corrosion products and

flux shall be removed by abrasive blasting, sanding, wire brushing, or other mechanical means. Surfaces shall be cleaned of all grease, oil, and dirt by solvent wiping and rinsing, vapor degrease, or caustic wash followed by rinsing. Operator shall verify cleaning quality prior to release to next

operation – No Contamination Permitted.

Pretreat with TT-C-490, Type II or III. Use of DOD-P-15328 to meet TT-C-490,

Type III is authorized.

-OR-

Zinc plate per ASTM B633, SC3, Type II, Clean per TT-C-490, Method 2.

Then apply one coat of primer in accordance with formula 150 per MIL-P-24441/20. The primer shall have a dry film thickness of 3-4 mils. Then apply two continuous film coats of enamel in accordance with MIL-DTL-15090 Type II or III, CL2. Each coat shall have a minimum thickness of .001 inches. Dry film thickness orange peel shall be kept to a minimum. Acceptable amounts of orange peel shall be specified by procuring activity.

\*CAUTION: For MIL-P-24441/20 and MIL-E-15090 Type II Coating System, Force Drying or Baking in Oven is Prohibited.

9361 REVB Chem Film Per MIL-DTL-5541, Class 3. Primer MIL-P-53022. Paint shall be applied as polyurethane enamel Sherwin Williams F63TXAA487-4353 catalyst ratio 6:1 Dark Gray.

9362 REVB Apply one coat of epoxy polyamide primer per MIL-PRF-23377, dry film thickness of 0.06 - 0.9 mils. Top coat shall be aliphatic polyurethane coating per MIL-DTL-53039B, Fed color 34094, equivalent to CARC 383, green. (MIL-C-46168 has been superseded). Top coat dry film thickness 1.8 to 2.4 mils. Thinner for top coat shall be per MIL-T-81772, Type 1.

After all machining and welding operations are completed, rust or other corrosion products and 9363 REVA flux shall be removed by abrasive blasting, sanding, wire brushing, or other mechanical means. Surfaces shall be cleaned of all grease, oil, and dirt by solvent wiping and rinsing, vapor degrease, or caustic wash followed by rinsing.

> Pretreat with TT-C-490, Type II or III. Use of DOD-P-15328 to meet TT-C-490, Type 3 is authorized.

Then apply one coat of primer in accordance with formula 150 per MIL-P-24441/1. The primer shall have a dirt film th'k of 3-6 mils. Then apply two continuous film coats of enamel in accordance with MIL-E-15090 Type II or III, CL2. Each coat shall have a min. th'k of .001 inches. Dry film th'k orange peel shall be kept to a min. acceptable amounts of orange peel shall be specified by procuring activity.

9364 Chromate conversion coat per MIL-DTL-5541, Class 1A. One coat zinc chromate primer, .0002-.0010 thick per TT-P-1757, Color Y, two coats tan enamel per MIL-E-15090, .001 thick, Class 2, Type III.

9365 MIL-E-15090, Formula 3, Class 2, Type III.

9366 REVA Al conversion per MIL-DTL-5541, Class 1A. Primer per MIL-P-53022. Finish per MIL-C-46168, color olive drab (Color 34094, 383 epoxy coating).

Silver Plate per AMS 2411, .0003 - .0006 thick.

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- 9368 REVA 1. Zinc - Plate per ASTM B633, FE/ZN8, Type II.
  - 2. Clean per TT-C-490, Method II.
- 9369 Finish: Zinc Plate with Chromate Overcoat, Color matte olive drab per ASTM B633, Type II, FE/ZN 8 or ASTM B695 Type II, Class 8, or DIN 267 A3D.
- 9370 Passivate per QQ-P-35, type optional. Application of coatings shall be in accordance with MIL-F-14072. Apply primer per MIL-P-53022. Apply top coat per MIL-C-46168 type optional, green, 383 (34094). Alternate top coat: MIL-C-53039 green, 383 (34094).
- 9371 1). Apply one coat of primer per MIL-P-23377, Type II. 2). Apply final paint film per MIL-C-46168, Green 383

(Color 34094 Per FED-STD-595).

- 9372 Passivate per QQ-P-35 dry film lube per M46010 Type I.
- 9373 REVA Part A: Paint with one coat of black epoxy baking primer. Following application, cure for 15 minutes at 400°F. (This is epoxy baking primer series #9734 available from:Raffi and Swanson, Inc.,100 Eames St., Wilmington, MA 01887

Part B: Paint with one coat of black polyurethane, min. dry flim thickness 1.5 mil, Eastern ChemLac Urachem, W5055 with exterior catalyst R1100. Thin with solvent R1200. Mix 4-1-1 (adjust thinner as required, consult ECL for thinner greater than 1 part for VOC compliance). Cure 16 hours at room temperature or force for 15 minutes at 150°F to 200°F. Material available from Eastern Chem-Lac, 1100 Eastern Avenue, Malden, MA 02148.

- 9374 Black oxide per MIL-C-13924, Class 1 without supplementary preservative treatment.
- 9375 REV A Zinc plate per ASTM B633 Type II - FE/ZN 12, Type II Black Dichromate.
- 9376 Sherwin Williams Formula No. F63JXW0445, Color Off-White.
- 9377 REV A Industrial E-Coat: Color - Black; Cathodic Epoxy Material. 0.4 mil minimum thickness to meet 96 hour salt spray per ASTM B117. (Note: This finish requires curing at temperatures above

If <u>rubber</u> mounts are to be coated, curing times should not exceed the following to avoid postcure changes to the rubber:

300°F - 20 minutes max.

350°F - 10 minutes max.

Note: This finish meets FMTV requirements per US Army Drawing 12420325, Method 7.

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Lec	9378 REVB	Mil-C-26074, Electroless Nickel, Grade B .0002 to .0005 or equivalent per AMS2404.  Acceptable alternative finish:
		Nickel Plate IAW QQ-N-290 Class 1 Grade F.
	9379	Anodize per HS 334 Type II, Class 2, Non Reflective Gray with Nickel Acetate Sealant.
	9380	Finish per MIL-C-81706, Class 3.
	9381	Nickel Plate .00020004 thick with a .000025 min. thick black chrome flash.
	9382	Hard anodize and seal IAW MIL-A-8625, Type III, CL1, $.002 \pm .0005$ . The water seal shall consist of boiling parts in deionized water for a minimum of 30 minutes.
	9383	Caustic dip per Barry 909, followed by aluminum conversion coat per Barry 920, and apply one coat of #27038 black epoxy polyamde coat. Smooth finish, bake at 200° F for 1 hour.
	9384	Caustic dip per Barry 909, followed by aluminum conversion per Barry 920, and apply one cost of Sherwin Williams #F63TXW1440 polane "T". Smooth finish, bake at 200° F for 1 hour.
	9385 REVA	Clear chromate, power coat, hybrid, smooth finish $20^\circ$ - $30^\circ$ mat, color Tiger DryLac - RAL 9002, off white.
	9386 REVA	Clear chromate, power coat, hybrid, smooth finish $30^\circ$ - $40^\circ$ semigloss, color Morton Corvel 70-2015, Raven black.
	9387 REVA	Clear chromate, powder coat, hybrid, smooth finish 30° - 40° semigloss, Motron Corvel 40-7044, gray.
	9388	After all machining and welding operations are completed, rust or other corrosion products and flux shall be removed by abrasive blasting, sanding, wire brushing, or other mechanical means. Surfaces shall be cleaned of all grease, oil, and dirt by solvent wiping and rinsing, vapor degrease, or caustic wash followed by rinsing.
		Pretreat with TT-C-490, Type II or III. Use of DOD-P-15328 to meet TT-C-490, Type 3 is authorized.
		Then apply one coat of primer in accordance with TT-P-645, Color Y. The primer shall have a

Then apply one coat of primer in accordance with TT-P-645, Color Y. The primer shall have a dry film thick of 3-6 mils. Then apply two continuous film coats of enamel in accordance with MIL-E-15090 Type II or III, CL2. Each coat shall have a min. thick of .001 inches. Dry film thick orange peel shall be kept to a min. acceptable amounts of orange peel shall be specified by

procuring activity.

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9389 Passivate per Hamilton Standard SVHS 12545 Type II. (Abrade surface using 80 grit paper, passivate using solution concentration and time listed.) To be performed by Hamilton Standard approved sources only. 9390 Silver plate .0002 - .0006 thickness, per QQ-S-365, Type I, Grade B. 9391 Anodize per Hamilton Standard specification HS 334 Type II, Class 1. To be performed by Hamilton Standard approved sources only. 9392 Black urethane texture- 4 part paint, 1 part catalyst. 9393 LM waterbased paint: Eastern Chem-Lac #W5649 Barry Controls Yellow WL Cure. See Barry Report #1186 for application information. 9394 Light yellow dichromate. 9395 Powder Coated Black per Kenworth Specification R026-198-6. See Barry Report #1191. 9396 Hard anodize per MIL-A-8625, Type III, Class 1. 9397 Prime per TT-P-645 or TT-P-664, one coat dry film thickness of .0006 to .0008 thick zinc-molybdate, alkyd. Apply 2 coats .001 inch minimum dry film thickness each coat of light gray formula #III, Type III, Class 2. Paint per Mil-E-15090. Mask as indicated on drawing. 9398 Grit Blast, treat with zinc phosphate per TT-C-490. Prime with epoxy-polyamide green primer per MIL-P-24441/20. Finish with grey epoxy-ployamide paint per MIL-P-24441/27 color 26307 per FED-STD-595.

9399 Passivate Per QQ-P-35, Type VI.

9400 Finish all exposed aluminum surfaces as follows:

- Aluminum conversion coat (gold). a)
- b) Pretreat primer per MIL-P-53022.
- Corrosion inhibiting epoxy primer per DOD-P-23377, c) .001-, 0015 thick.
- Green 383 Carc paint per MIL-C-46168, .0018-.005 thick. d)
- e) Mask ALL elastomer sections prior to finishing.

9401 REVA	Zinc plate per ASTM B633, Class FE/ZN 12, Type II. Prime with zinc chromate primer per TT-P-1757, Color Y, and finish with light gray enamel per MIL-E-15090, Type II, Class 2 (2 coats of enamel), Color No. 26307 per FED-STD-595.
9402	Anodize per Mil-A-8625, Type II, Class 2. Color: Black Number 37038 per FED-STD-595.
9403	Dikronite coat IAW DOD-L-85645, Type I.
9404 REVA	Primer shall be one coat dry film thickness of .0006 to .0008 thick per TT-P-645 or TT-P-664. Paint shall be light grey color 23607 per FED-STD-595, applied in two continuous film coats, in a minimum of .0010 each per MIL-E-15090, Class 2.
9405	Sealed anodized coating per MIL-A-8625, Type 3 Class 2, Dye color white.
9406	Two part epoxy paint. Du Pont 25P color white (63225P).  1:1 mix ratio with VF-525 activator. Apply in two coats (.005 Ref. ea.) for total build up of .010 minimum. Supplier:  Boyd Coatings Research Company 1-508-562-7561.
9407	Black Electrocoat, Commercial Quality.
9408	Epoxy polyamide primer, .0005 to .0008 thick per MIL-P-85582, Type 1, followed by two coats of polyurethane coating .0015 to .0025 thick total per MIL-C-81773, Color No. 26270 per FED-STD-595. (Mask per drawing). Coating thickness to be verified by process surveillance.
9409 REV A	Zinc Plate per ASTM B633, Class FE/ZN8, Type II. To reduce the risk of hydrogen embrittlement, carefully follow the requirements of ASTM B633 related to heat treatment time and temperature based on the physical properties of the stud.
9409 REV A 9410 REVA	embrittlement, carefully follow the requirements of ASTM B633 related to heat treatment time
	embrittlement, carefully follow the requirements of ASTM B633 related to heat treatment time and temperature based on the physical properties of the stud.  Electroless Nickel in Accordance with MIL-C-26074, Class 4, or equivalent per AMS2404,
9410 REVA	embrittlement, carefully follow the requirements of ASTM B633 related to heat treatment time and temperature based on the physical properties of the stud.  Electroless Nickel in Accordance with MIL-C-26074, Class 4, or equivalent per AMS2404, .00040006 inch thickness.  Clean and Phosphate dip. Mask as required per drawing. Apply one coat

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9414 REVA Chem Film IAW MIL-DTL-5541 Class 3, Primer MIL-P-53022 Type 2 Top Coat MIL-C-85285 Type 1, Color Fed Std 595 #26270 Haze Gray.

9415 Black Zinc Chromate .0002/.0004.

9416 REVA Electroless nickel flash plate (for hole coverage) per 1.4.3.1 of MIL-SST-171, Class 1, .0001 inch thickness, followed by Zinc plate per 1.9.2.2, of MIL-STD-171 Class 2, .0005 inch thickness.

Passivate per QQ-P-35 (Barry finish No. 901) followed by black oxide per MIL-C-13924, Class 4 (Barry finish No. 9243). Previously passivated parts may be used and do not require re-passivation.

9418 REVA Acrylic Electrocoat, (ANODIC), using #670K005 Morton Black paint. Proper cleaning and Iron Phosphate treatment required prior to E-Coat. Fed Std 595A, Semi-gloss black (27038).

9419 REVA Hard anodize per MIL-A-8625, Type III, Class 1, .0008 to .0012 inch thick. Seal with hot deionized water, 140°F to 180°F for 30 minutes minimum.

9420 REVA Hard anodize per MIL-A-8625, Type III, Class 1, .0016 to .0024 inch thick. Seal with hot deionized water, 140°F to 180°F for 30 minutes minimum.

Phosphate coat with Turco Paintite or equal. One coat Eastern Chem-Lac Inc. Industrial Lacquer #W8089, (red). Masking as per drawing.

Apply primer per MIL-PRF-85582, Type II, Class C2 or MIL-P-23377, Type II, Class C, dry film thickness 0.6 to 0.9 mils. Apply topcoat per MIL-PRF-85285, Type I, lusterless grey color no. 36495 per FED-STD-595, dry film thickness 1.7 to 2.3 mils.

Black finish with zinc phosphate pre-treatment. Single coat with minimum dry film thickness of 15 micrometers (0.0006 in). Performance requirements of 250 hrs salt spray (ASTM B117-97) with 1.5 mm (0.06 in) maximum creepage. Adhesion 90% minimum (ASTM D3276-96).

20 Zinc plate per ASTM B633, FE/ZN 8, Type I.

Aluminum conversion coating per MIL-DTL-5541, Class 1A (color per drawing and applicable color chips). Color to be yellow unless otherwise specified. This finish is same as 920.

9426

Apply one coat of primer in accordance with formula 150 per MIL-P-24441/1. The primer shall have a dry film thickness of 3-6 mils. Then apply two continuous film coats of enamel in accordance with MIL-E-15090 Type II or III, CL2. Each coat shall have a minimum thickness of .001 inches. Dry film thick orange peel shall be kept to a minimum. Acceptable amounts of orange peel shall be specified by procuring activity.

9427

Prepare metal surface and apply adhesive bonding system per drawing or Barry Controls Data Sheet.

9428

Black E-Coat per Ford Motor Company Specification No. WSB-M64J28-A1/A4.

9429 REVB

Electrostatic spray using Dupont Powder Coatings, Product Name: Bead Blast Silver Color Number: PFA204B1. Pretreat with Bonderite 1000. Final cured thickness to be 2.5 to 3 mils. Cure at 450°F metal temperature for 15 minutes.

Finished product must comply with Harley-Davidson Motor Company General Engineering Standard 07011. Vendor must submit first article PPAP samples per sections 5.1 thru 5.5, 5.9, and 5.11. Vendor must submit samples per sections 5.1 thru 5.3 with each production lot.

9430

All structural components shall be cleaned per SSPC SP-3 and coated with one touch up coat and one full coat of Zinc Molybdate Primer, TT-P-645 or equal. Then paint with two coats of Imperial Chemical Industries ICI DEVOE DEVFLEX 4208-9800 Safety Blue Waterborn Acrylic Enamel Paint (EB Part Number 218022606) or Equal. Color to be equal to color chip 15123 as shown in Federal Specification 595.

9431

One coat Sherwin Williams Fast Production Enamel or equivalent finish. The product shall meet the requirements for a 96 hour salt spray IAW ASTM B117 and evaluated IAW ASTM D1654 Procedure B, Table 2, less holes and interior surfaces of end bosses. Rating must be 8 or better. This finish must also comply with the final protective finish procedure IAW 12420325 Method 7.

PROCEDURE - 12420325

Method 7:

Surfaces that do not have a polyurethane topcoat but must have a protective corrosion resistant finish for interior and exterior exposure.

Finish:

The component shall be corrosion resistant to high humidity, Salt Spray, Road De-Icing chemicals and Atmospheric contamination. No perforation or other damage caused by corrosion shall require repair or replacement of parts. The corrosion prevention method shall not require actions (Beyond the normal washing and replacement

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of damaged finish) to keep the corrosion prevention in effect. The color of the finish is optional or within the specification of the component. This will insure material/finish to ten (10) years in military environment.

Application: IAW best commerical/paint manufacture's method color optional:

#34094 Lusterless #383 Green or #37030 Lusterless black are

preferred.

9432 REVA Finish P513.1M per Spec. MIL-F-14072 Treat per MIL-DTL-5541 Class 1A. Prime with zinc chromate primer per TT-P-1757-1, Color Y. Finish per MIL-C-22750, semi gloss olive drab epoxy (Color No. 24084), with a dry film thickness of 0.0254mm (1mil) to

0.0381mm (1.5mils).

9433 Electroless Nickel plating per AMS 2404, Class 1.

9434 B CARC tan exterior paint for aluminum, per Raytheon G781772, Type IX, Grade 1.

Components already finished per Barry Finish 920 do not require additional application of chromate per section 3. Handling damage to finish 920 may be repaired

by brush or by pretreatment wash primer per section 3.1, grade 1 note.

Recommended materials for this finish are Sherwin-Williams primer part #E90H226 (Barry #67005816) catalyst part #V93V227 (Barry #67005815), and finish paint part #F93H107 (Barry #67005813). Use only MIL-T-81772 type 1 reducer. Reducers must be polyurethane grade. All materials must be from the Qualified Product List,

and full QPL certification is required with each shipment.

25 Zinc-Cobalt plate per ASTM B840 class 1, type D, grade 6.

2003 zinc plate .0003 to .0004 thick per ASTM B633, Class FE/ZN 8, Type III, w/trivalent

chromium. USE OF HEXAVENT CHROMIUM IS PROHIBITED.

9437 Chromate conversion coat per ASTM B-449. Color to be yellow/bronze unless otherwise

specified. When applied to 6061-T6 wrought or 360 die cast aluminum alloys, must pass

96 hours neutral salt spray per ASTM B-117 with no corrosion.

Mask all exposed elastomer sections prior to finishing.

Apply corrosion inhibiting epoxy primer per DOD-P-23377, 0.001-0.0015 inch thick.

Apply green 383 CARC per MIL-C-46168, 0.0018-0.005 inch thick.

9439 Prime with Amerlock 400, Primer Epoxy, White, 0.0001 to 0.003 thick coat

with Amercoat 450HS, Top Coat, White, 0.001 to 0.003 thick. Suggested source,

Ameron Inc., Protective Coating Division. Apply and cure per Manufacturer's

directions. Suggested paint vendor: Valley Precision, Burbank, CA.

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9440 Base finish: Aluminum Conversion coating per MIL-DTL-5541, Class 1A base finish.

Prime with AMERLOCK 400, Primer Epoxy, White, 0.001 to 0.003 thick.

Coat with AMERCOAT 450HS, Top Coat, White, 0.001 to 0.003 thick.

Suggested source, Ameron Inc., Protective Coating Division.

Apply and cure per manufacturer's directions.

Suggested paint vendor: Valley Precision, Burbank, CA..

9441 REVA Metal Prep and Painting of Navy Mounts per General Dynamics Electric Boat Division Specification 3092. A copy of specification 3092 can be obtained from the Technical

Review Group.

- A). Prior to molding, blast, degrease and phosphate metal components.
- B). After molding, remove any loose flash and blast exposed metal surfaces. The blast profile shall be at least 1 mil deep, but not too exceed 3 mils deep.
- C). Paint all exposed metal surfaces.
- D). The paint system shall be applied to the ID of bolt holes and internal surfaces of sleeves but only to the extent that no bare metal exists. Paint thickness shall not adversely affect mount assembly.
- E). The finish shall be a two coat epoxy paint system in accordance with either MIL-P-24441, Type IV (formula 150 green primer and appropriate formula topcoat for color) or a two coat MIL-P-23236, Type IV, Class 1, Grade B epoxy paint system. Topcoat color shall be black and approximately the same as MIL-P-24441, Type IV, Formula 153, which matches FED-STD-595 color chip #37038.
- F). The recommended primer is MIL-DTL-24441C, Type 4, 150 Green Primer, approximately 3 mils thick.
- G). The recommended topcoat is MIL-DTL-24441C, Type 4, 153 Black, approximately 3 mils thick.
- H). The Primer and Topcoat can be purchased from Ameron International Performance Coating & Finishing Group. The Primer is typically provided in a 5 gallon bucket containing Component A (p/n 67005763) and Component B (p/n 67005764) premixed. The Topcoat is typically provided in a 5 gallon bucket containing Component A (p/n 67005761) and Component B (p/n 67005762) premixed.
- I). The total minimum dry film thickness shall be 6 mils. To verify the setup, measure the thickness on at least one part in accordance with ASTM D1186 on both sides of the flange and both sides of a washer.
- J). For mounts with rated load less than 450 pounds, paint may uniformly overlap the rubber by no more than 1/16 inch. Paint overlap in excess of 1/16 inch shall be irregular up to but not exceeding 1/8 inch total.
- K). For larger mounts rated for 450 pounds or larger, uniform paint overlap of 1/8 inch is acceptable. Paint overlap in excess of 1/8 inch shall be irregular up to but not to exceed ½ inch total.

9442 B Modified from AAAV Finish Method 101 – ALUMINUM, INTERIOR

1. Buff, blast or machine all surfaces to remove oxide.

- 2. Pretreat with Alodine 5700 or Navarc 818 or NAVAIR Trivalent Chromium Pretreatment. Barry # 67005770
- 3. Mark or plug all holes. 0.05 inch (1.27 mm) radial paint free area allowable around holes.
- 4. Prime with MIL-P-85582 Type II, Class N epoxy primer, dry film thickness 0.015 to 0.023 mm (0.6 to 0.9 mil) or MIL-P-53022 primer, dry film thickness 0.025 to 0.063mm (1 to 1.5 mil). Recommended for MIL-P-53022 use Sherwin-Williams E90H226 and V93V227, Barry 67005721 and 67005722.
- 5. Topcoat with MIL-PRF-22750 sea foam green epoxy, Color #24533. Dry film thickness shall be 0.033 to 0.043 mm (1.3 to 1.7 mil). Recommended use Sherwin-Williams F92G227, Barry 67005765.

9443 1) Chem. film per MIL-DTL-5541, Class 1A

- 2) 2 Coats of Epoxy Primer per MIL-P-85582.
- 3) Paint Finish per MIL-C-22750. Color shall be Number 17925 White per FED-STD-595.

The first use of this finish was the Lockheed – Boeing Ft. Worth F22 Program

9444 Black E-coat per Bombardier Recreational Products spec 1739:

Material: PPG Powercron 590 or 640

Substrate: Steel

Pretreat using a)zinc phosphate, thickness 150 to 350 mg/sq. ft or b) zinc cobalt per Bombardier Recreational Products spec 1843

Dry film thickness 0.5 to 0.9 mil

All other requirements per Bombardier Recreational Products spec 1739

1). Surface preparation of mounting plates shall consist of masking all faying surfaces, threads.

label plates, etc., required to be left unpainted.

- 2). Dry abrasive blast per ANSI A159.1, No. 6, commercial blast cleaning (SSPC-SP6) or equal, to min. 25 micron (0.001) profile.
- 3). As soon as practicable after cleaning but prior to the onset of any rust bloom to surface, apply one coat of epoxy primer per MIL-P-24441/20, formula 150, Type 3, dry film thickness (DFT) 0.002 Mil.
- 4). Intermediate and topcoat, epoxy polyamide enamel per Mil-P-24441/21, formula 151, Type 3, DFT 0.002 Mil each.
- 5). Total DFT of complete paint system is 0.006 Mil.

9446 REV A Apply a 1.0 - 2.0 MIL thick coat of epoxy polyamide primer per MIL-PRF-23377. Top coat shall be 1.8 – 2.4 MIL thick paint film of aliphatic polyurethane coating per MIL-DTL-53039, color TAN 686A, color number 33446 conforming to FED-STD-595. Thinner for primer and top coat shall be per MIL-T-81772, Type 1. Exterior marking shall be done with the same paint except the color shall be BLACK 37030 per FED-STD-595.

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9447

- 1. Prepare surfaces by masking all threads and areas designated as coating free.
- 2. Clean all areas to be coated with a chlorinated solvent and a slightly abrasive pad or a rough cloth.
- 3. Rinse cleaned surfaces with acetone or MEK.
- 4. Prime surfaces to be coated with Dow Corning 1200 primer per manufacturer's recommendations. Primer thickness need not be measured.
- 5. Allow primer to dry for at least 1 hour.
- 6. Paint surfaces by brush or spray with Dow Corning 92-007 silicone coating per manufacturer's recommendations.
- 7. Total coating thickness to be  $.006 \pm .002$ .

# 9448 REVB Finish IAW Army drawing 12469113 or 12469120. Top Coat color shall be black 37030. Process and materials listed below are recommendations ONLY, actual finish certification must be to latest rev of Army drawings.

This is a multi-step finish as follows:

- 1. Surface cleaning to remove all moisture, oils, greases, salts, corrosion, dirt and soils to a white metal condition. If the primer is to be applied more than four hours after cleaning, a zinc phosphate treatment is required (see Army drawings).
- 2. Organic Zinc-Rich primer, must have a minimum 80% content by weight of zinc particles. Dry film thickness shall not be less than 64 microns. Zinc dust pigment must conform to ASTM D-520, Type 1, and shall be IAW SSPC-Paint 20, Zinc-Rich Primers Type II, "Organic". Recommended material Sherwin-Williams single package E90GC101.

  Barry 67005829.
- 3. Epoxy primer IAW MIL-P-53022 or MIL-P-53030. Dry film thickness to be 40 microns minimum. Recommended material Sherwin-Williams E90H226 and V93V227, Barry 67005721 and 67005722.
- 4. Topcoat with Polyurethane IAW MIL-C-53039, color black 37030. Dry film thickness to be 46 microns minimum. Recommended material Sherwin-Williams moisture cured single package F93B102, Barry 67005800.
- 5. Coating adhesion test shall be IAW TT-C-490 and be performed once per day minimum.
- 6. Parts coated IAW these drawings shall meet the finish performance requirements of drawing 12469122.
- Olean and degrease surfaces to be painted. Apply one coat of Chemflash 500.
- 9450 A Clear hardcoat anodize type 3, class 1 of Mil-A-8625 Vacuum impregnation using Loctite PMS 10E, single cycle.
- 9451 Zinc Phosphate: 150mg/ft<sup>2</sup> min. to 372mg/ft<sup>2</sup> max.
- 9452 Phosphoric Anodize and Prime with Cytec BR127 IAW ASTM-D3933.

Part shall be individually wrapped in kraft paper and sealed in 6 mil, black polyethylene bags. Store in an environmentally controlled area.

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Handling – All parts during and after processing and before bonding should be handled as little as possible and only with clean, lint-free cotton or nylon fabric gloves. If it becomes necessary to handle or touch parts, contact should be limited to surfaces not be bonded.

- 9453 A ASTM B 841 99 zinc / nickel plating specification (ASTM B 841 99), and classification 4.2.1 Type A With Colorless (blue bright) conversion coating, Grade 10. Minimum thickness of zinc / nickel coating shall be no less than 10 microns. Plating specification has been modified for a minimum and maximum Nickel content of 12% and 15%, respectively.
- This finish is the cleaning and organic zinc rich primer portions of Barry Finish 9448 only and is intended to be used in conjunction with Barry finish 9455 for a complete coating system.

Finish IAW Army drawing 12469113 through paragraph 4, section C or 12469120 through paragraph 4, section B. Process and materials listed below are recommendations ONLY, actual finish certification must be to latest rev of Army drawings.

This is a multi-step finish as follows:

- 1. Surface cleaning to remove all moisture, oils, greases, salts, corrosion, dirt and soils to a white metal condition. If the primer is to be applied more than four hours after cleaning, a zinc phosphate treatment is required (see Army drawings).
- 2. Organic Zinc-Rich primer, must have a minimum 80% content by weight of zinc particles. Dry film thickness shall not be less than 64 microns. Zinc dust pigment must conform to ASTM D-520, Type 1, and shall be IAW SSPC-Paint 20, Zinc-Rich Primers Type II, "Organic". Recommended material Sherwin-Williams single package E90GC101, Barry 67005829
- 3. In the case of finish per drawing 12469113, heat cure per paragraph 4, section C.

9455 REVA This finish is the epoxy primer and CARC top coat portions of Barry Finish 9448. This finish is intended to be applied after Barry finish 9454 for a complete coating system.

Finish IAW Army drawing 12469113 or 12469120 primer and top coat sections only. Top Coat color shall be black 37030. Process and materials listed below are recommendations ONLY, actual finish certification must be to latest rev of Army drawings.

This is a multi-step finish as follows:

- 1. Lightly scuff surface of Zinc Rich primer finish (Barry 9454) and wipe clean with solvent.
- 2. Epoxy primer IAW MIL-P-53022 or MIL-P-53030. Dry film thickness to be 40 microns minimum. Recommended material Sherwin-Williams E90H226 and V93V227, Barry 67005721 and 67005722.
- 3. Topcoat with Polyurethane IAW MIL-DTL-53039, color black 37030. Dry film thickness to be 46 microns minimum. Recommended material Sherwin-Williams moisture cured single package F93B102, Barry 67005800.

- 4. Coating adhesion test shall be IAW TT-C-490 and be performed once per day minimum.
- 5. Parts coated IAW these drawings shall meet the finish performance requirements of drawing 12469122.
- Zinc Plate Per ASTM B633, FE/ZN 12 (.0005 inch thick) Type III (Clear). Final finish with Trivalent Chromate only. No Hexavalent Chromate allowed. This finish is to be RoHS compliant. Finished parts must be supplied with Certification of the Zinc and Trivalent Chromate processes clearly indicating RoHS compliance.
- 9457 REVA Electroless nickel plate .0005" minimum thick per MIL-C-26074, Class 1, Grade B, or equivalent per AMS2404, Teflon Impregnated, no relief bake necessary, per Section 3.4.allowed.
- Passivate per ASTM A967.
- After molding before assembly apply primer per MIL-P-53022, TYPE II (Sherwin Williams E90H226 and V93V227, Barry 67005721 and 67005722) or MIL-P-53030 IAW
  MIL-DTL-53072, 1.2 MIL (30 μM) minimum dry film thickness. Overspray on elastomer section allowable but not desired.
- Aluminum conversion coating per MIL-DTL-5541, Type II, Class 1A.
- Chemically coat per ASTM B449, Class 3.
- Zinc Phosphate per Barry Finish 900 then apply "vanishing oil" or any light non-wax, non-preservative, RoHS compliant, petroleum oil for oxidization protection during shipping. Do not use new or used motor oil or any oil containing lead.
- 9463 CARC finish per Raytheon G781772, Grade 3. Type (color) to be determined IAW latest revision of Raytheon drawing 13552762. Finish supplier to contact Barry Controls purchasing for a copy of the latest drawing revision. FINISH MUST BE APPLIED BY A RAYTHEON APPROVED SUPPLIER.

  (Reference only: drawing 13552762 rev E specified Type IX "Desert Sand" (Tan 686A)).
- Steel grit blast all over. Phosphate per TT-C-490, Type I.
- Prime with one coat 0.002 mil thick of epoxy Polyamide primer per MIL-DTL-24441/29, formula 150, type 4. Finish with one coat 0.004 mil thick of epoxy polyamide enamel per MIL-DTL-24441/30, formula 151, type 4.
- All exposed structural components to be finished as follows:
  Phosphate dipped per TT-C-490, Type I or grit blasted all over.
  Painted with epoxy paint per MIL-DTL-24441/29 primer .002 inch (2 Mils) thick and MIL-DTL-24441/31 topcoat, color white .004 inch (4 Mils) thick.
- Mask as specified on drawing.

HUTCHINSON 82 South Street Hopkinton, MA 01748 Prime one coat epoxy primer per MIL-PRF-23377, Type I, Class N. Use primer within 8 hours of mixing. Dry film thickness to be 1.0 mil  $\pm$  0.2 mil. Dry for at least 2 hours at room temp or 30 minutes at room temp followed by 30 minutes at 135  $\pm$  5 F.

Topcoat with polyurethane chemical-agent-resistant paint per MIL-DTL-53039, color green per FED STD 595, #34094. Dry film thickness to be 2.0 mil  $\pm$  0.2 mil. Dry for at least 48 hours at room temp or 15 minutes at room temp followed by 45 minutes at 130  $\pm$  10 F.

Periodically test for adhesion per Lockheed Martin spec 79P020007, Section 4.5.2.1 or per ASTM D3359, Method B, 6-line pattern, 2mm spacing.

Reference: Lockheed Martin spec 79P050000 Code 4001 and Code 4102, Lockheed Martin spec 79P020007

Note: This finish must be applied by a Lockheed Martin approved painting supplier. Barry Controls is not a qualified supplier.

9468 Fluorosilicone coating per Lockheed Martin spec 79771699

Clean exterior surfaces to remove dirt and oil (isopropyl alcohol suggested). Do not allow liquid to pool. Dry.

Mask as specified on drawing.

Attach witness sample tags, 2/lot minimum.

Spray on coating, Bryflex HTF-1. Coating thickness to be .0001-.0002 inches.

Cure 20 minutes at 210 F +/- 10

Visually inspect 100%. Color must be clear to milky. No delamination or pitting shall be visible at 1.75X magnification

Test adhesion on witness sample tags per ASTM D-3359 Method B

- 9469 Passivate per SAE-AMS2700.
- Surface clean per SSPC-SP 6/NACE No. 3, Commercial Blast Cleaning. Surface shall be free of all visible oil, grease, dust, dirt, mill scale, rust, coating, oxides, corrosion products, and other foreign matter. Apply Organic Zinc-Rich primer, must have a minimum 80% content by weight of zinc particles. Dry film thickness shall be 2.5 4.0 mil thick. Zinc dust pigment must conform to ASTM D-520, Type 1, and shall be SSPC-Paint 20, Zinc-Rich Primers Type II, "Organic". Recommended material Sherwin-Williams single package E90GC101. Barry 67005829.
- 9471 Surface clean per SSPC-SP 6/NACE No. 3, Commercial Blast Cleaning. Surface shall be free of all visible oil, grease, dust, dirt, mill scale, rust, coating, oxides, corrosion products, and other foreign matter. Hot dip galvanize, 2.0 3.0 mil

thick.

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Surface clean per SSPC-SP 6/NACE No. 3, Commercial Blast Cleaning. Surface shall be free of all visible oil, grease, dust, dirt, mill scale, rust, coating, oxides, corrosion products, and other foreign matter. Apply Inorganic Zinc-Rich coating, must have a minimum 80% content by weight of zinc particles. Dry film thickness shall be 2.0 – 4.0 mil thick. Recommended material Sherwin-Williams Zinc Clad XI Water Based Inorganic Zinc-rich Coating (Product # B69V00011).

9473 REV B One coat of BMS 10-11 Type I primer per BAC 5736.

9474

Procedure for POST MOLD application or touch-up of aluminum conversion coating per MIL-DTL-5541, Class 1A (Finish 920). Method designed to minimize damage to molded silicone and associated adhesives.

- 1. Clean with Aluminum Safe Cleaner (30 to 90 seconds)
- 2. Rinse thoroughly
- 3. Dip in chromate conversion solution-chromic acid bath- Alodine 600 RTU or Oakite equivalent. (3 to 15 minutes) Depends on coating color and speed.
- 4. Rinse thoroughly
- 5. Room Temperature Dry or accelerated Dry with hot air

9475 REV A Paint per Raytheon specification H372287, Type I, Grade 2 except in threaded holes as shown on drawing. Mask internal threads prior to painting. Threaded holes to be zinc primed only per TT-P-645.

Must be performed by a Raytheon approved supplier.

Latest revision of Raytheon specification shall be provided with purchase order.

9476 Trivalent chromium conversion coating per MIL-DTL-5541, Type II, Class 3.

Finish must be applied by a Lockheed Martin approved finish supplier. See BDS 2079 or Lockheed Martin spec 79P000010 for requirements.

Ref: Lockheed Martin spec 79P050000 Code 2005

Note: This is the low electrical resistivity variation of trivalent chemical conversion coating.

9477 Trivalent chromium conversion coating per MIL-DTL-5541, Type II, Class 1A.

Finish must be applied by a Lockheed Martin approved finish supplier. See BDS 2079 or Lockheed Martin spec 79P000010 for requirements.

Ref: Lockheed Martin spec 79P050000 Code 2004

Passivate in accordance with ASTM A967.

HUTCHINSON 82 South Street Hopkinton, MA 01748 Sample and test the finish in accordance with AMS2700, Annex A, Method 100 or 101. Method 102 may be used for ferritic 400 series alloy steels with greater than 16% chromium, austenitic stainless steels, and precipitation hardened steels. The lot may be tested 100% in lieu of sampling.

See BDS 2079 for further details.

Ref: Lockheed Martin spec 79P050000, Code 2401

9479 Mask as specified on drawing.

Prime one coat epoxy primer per MIL-PRF-23377, Type I, Class N. Use primer within 8 hours of mixing. Dry film thickness to be 1.0 mil  $\pm$  0.2 mil. Dry for at least 2 hours at room temp or 30 minutes at room temp followed by 30 minutes at  $135 \pm 5$  F.

Topcoat with polyurethane chemical-agent-resistant paint per MIL-DTL-53039 Type I or Type II or MIL-DTL-64159 Type I or Type II, color tan per FED STD 595, #33446. Dry film thickness to be 2.0 mil  $\pm$  0.2 mil. Dry for at least 48 hours at room temp or 15 minutes at room temp followed by 45 minutes at 130  $\pm$  10 F.

See BDS 2079 for other requirements such as adhesion testing and solvent resistance testing.

Ref: Lockheed Martin spec 79P050000 Code 4007 and Code 4102, Lockheed Martin spec 79P020007.

Note: This finish must be applied by a Lockheed Martin painting supplier approved for this finish. Barry Controls is not a qualified supplier.

Electroless nickel plate in accordance with SAE-AMS-C-26074 or SAE-AMS-2404, 0.001 inch minimum thickness. Phosphorous content of the nickel plating shall not exceed 5%.

9481 REVA Sherwin-Williams Metalastic DTM Acrylic Modified Enamel Black B55BZ600 WFT 5 – 8 mils DFT 3 – 5 mils

9482 REVB Primer Sherwin Williams
Zinc Clad III HS 100 Organic Zinc-Rich Epoxy primer
WFT 1.3 – 3.3 mils
DFT 0.8 – 2.0 mils

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Per Siemens specification STS-ENS-333.10872

Color: GREY GREEN

9483 REV B Primer Sherwin Williams

Zinc Clad III HS 100 Organic Zinc-Rich Epoxy primer

WFT 5.0 - 8.0 mils DFT 3.0 - 5.0 mils

Top coat Sherwin Williams

Macropoxy 646-100 fast cure epoxy

WTF 13.5 – 16.5 DFT 10.0 – 12.0 mils

Color: RAL 9005 (JET BLACK)

Per Siemens specification STS-ENS-333.10872

9484 Pre-treat as per MIL-DTL-5541 Class 1A;

Prime and paint all outside surfaces and edges per MIL-F-14072;

Prime per MIL-P-23377;

Final paint film: forest green per MIL-C-46168.

9485 REV A Tin plate per ASTM B545-97, Class D (.0008-.002 thick). Matte finish.

Passivate Per ASTM A967 or SAE AMS2700 Method 1 Type 6 or 7

or Method 2

9487 Coat per TMS-9009 Class 2.

The initial gloss @ 60 degrees, 80 minimum is waived.

Color to be black.

9488 TECTYL 506-EH WD

Apply with brush.

9489 Staburags NBU 30

Apply with brush.

9490 Clean: IAW TT-C-490 METHOD OPTIONAL

Pretreat: IAW TT-C-490, TYPE I

Optional: IAW TT-C-490, TYPE III, IAW DOD-P-15328

DRY FILM THICKNESS IAW MIL-DTL-53072

Primer: IAW MIL-P-53084 DRY FILM THICKNESS 1.0-1.2 mil Optional: IAW GM9984070, GM9984017, GM9984094 OR A-A-52474

COLOR SEMIGLOSS GRAY OR BLACK

Topcoat: IAW MIL-DTL-53039 OR MIL-DTL-64159

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DRY FILM THICKNESS IAW MIL-DTL-53072 COLOR #34094 LUSTERLESS #383 GREEN

OR:

Clean: IAW TT-C-490 METHOD OPTIONAL

Pretreat: IAW TT-C-490, TYPE I

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Optional: IAW TT-C-490, TYPE III, IAW DOD-P-15328

DRY FILM THICKNESS IAW MIL-DTL-53072

Primer: IAW MIL-P-53022 OR MIL-P-53030

DRY FILM THICKNESS IAW MIL-DTL-53072

COLOR #27875 SEMIGLASS WHITE

Topcoat: IAW MIL-DTL-53039 OR MIL-DTL-64159

DRY FILM THICKNESS IAW MIL-DTL-53072 COLOR #34094 LUSTERLESS #383 GREEN

9491 REVA Clean: IAW TT-C-490 METHOD OPTIONAL

Pretreat: IAW TT-C-490, TYPE I

Optional: IAW TT-C-490, TYPE III, IAW DOD-P-15328

DRY FILM THICKNESS IAW MIL-DTL-53072

Primer: IAW MIL-P-53084 DRY FILM THICKNESS 1.0-1.2 mil Optional: IAW GM9984070, GM9984017, GM9984094 OR A-A-52474

COLOR SEMIGLOSS GRAY OR BLACK

Topcoat: IAW MIL-DTL-53039 OR MIL-DTL-64159

DRY FILM THICKNESS IAW MIL-DTL-53072

**LUSTERLESS #686 TAN** 

OR:

Clean: IAW TT-C-490 METHOD OPTIONAL

Pretreat: IAW TT-C-490, TYPE I

Optional: IAW TT-C-490, TYPE III, IAW DOD-P-15328

DRY FILM THICKNESS IAW MIL-DTL-53072

Primer: IAW MIL-P-53022 OR MIL-P-53030

DRY FILM THICKNESS IAW MIL-DTL-53072

COLOR #27875 SEMIGLOSS WHITE

Topcoat: IAW MIL-DTL-53039 OR MIL-DTL-64159

DRY FILM THICKNESS IAW MIL-DTL-53072

**LUSTERLESS #686 TAN** 

Apply one coat MIL-PRF-23377 Epoxy Primer Type I, Class C1 or C2 in

accordance with Goodrich Specification PS2017 to Aluminum Surface not covered by the Elastomer or Bonding Primer. Overspray is permissible on

adjacent surfaces.

Anodize per MIL-8625, Type I - Chromic Acid process or Type II - Sulphuric

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Acid process, except using clear water seal instead of Dichromate seal. Unless otherwise specified on drawing, anodize is to be Class 1 per MIL-A-8625 non-

dyed. Finish with 2 coats of BMS 10-11 Type I primer per BAC 5736.

9494 REV A Zinc Plate Per ASTM B633, FE/ZN 12, SC 3, Type VI.

Final finish with Yellow Trivalent Chromate. No Hexavalent Chromate allowed.

This finish is to be RoHS compliant. Finished parts must be supplied with Certification of the Zinc and Trivalent Chromate processes indicating RoHS

compliance.

ELECTROLESS NICKEL PLATE PER SAE AMS2404, CLASS 3. 9495

> PHOSPHORUS CONTENT 10 PERCENT MINIMUM. FINAL PLATING THICKNESS .0010-.0020. PLUG THREADED HOLES BEFORE PLATING.

9496 Chromate coating per MIL-C-17711, color yellow or gold. Must be RoHS

compliant.

9497 REVB Kalgard Black 094-9218PF 1.8-2.2 mil dry film thickness.

9498 REVA Zinc plate per ASTM B633, Class FE/ZN 12, Type II, with trivalent chromate.

USE OF HEXAVALENT CHROMIUM IS PROHIBITED.

This finish is to be RoHS compliant.

9499 Aluminum conversion coating per MIL-DTL-5541, Type II, Class 3 RoHS

compliant.

9500 Anodize per MIL-A-8625, Type 1B. Supplemental treat with solid film lube per

> SAE AS5272, applied per SAE AS5528. The solid film shall be applied in accordance with AS5528 for Type 2 except that the baking requirement of paragraph 3.2.8 shall be  $325^{\circ}F \pm 10^{\circ}F$  for two hours after parts have stabilized at 325°F. Paragraphs 3.4.4 and 3.4.5 of AS5272 shall not apply to items baked at 325°F. All paragraphs in AS5528 that reference applied film thickness shall be amended to require a thickness of .0005 to .0010 (0.013 to 0.025mm).

Reference General Dynamics Specification # 119A2115.

9501 REVA - Primer:

PAINT-10033 (Arkote 31)

(For Reference only WFT Mean thickness: 3.9 mils to 5.5 mils)

DFT Mean thickness: 1.6 mils to 2.4 mils

-Top Coat:

PAINT-20020 (Arkote 110 HES noir)

(For Reference only WFT Mean thickness: 5.5 mils to 7.9 mils)

DFT Mean thickness: 2.4 mils to 5.5 mils

Total DFT mean thickness comprised between 4 mils and 7.9 mils

Gloss 60±20%

Refer to Paint control plan for other requirement such as adhesion testing.

9502 - Primer:

PAINT-10033 (Arkote 31)

(For Reference only WFT Mean thickness: 3.9 mils to 5.5 mils)

DFT Mean thickness: 1.6 mils to 2.4 mils

Refer to Paint control plan for other requirement such as adhesion testing.

9503 Strippable Plastic Coating Type II Grade C Blue.

Applied by dipping in hot melt tank.

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	Effectivity	Date: 6/3/2020.	SEE UPDATED LO	G PAGE 92
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9504	2020, SEE UPDATED LOG PAGE 92 Zinc Nickel finish per Ford Motor Company specification WSA-M1P87-A1.
9505	Zinc Nickel finish per Ford Motor Company specification WSS-M1P87-B1.
9506	Zinc Plate Per ASTM B633 Class FE/ZN 12 Type V Hexavalent Chromate is prohibited. Use of a sealing coat is prohibited. This finish is to be RoHS compliant.
9507	Lord Corp. Aeroglaze 9741/9700. Mix ratios between 5:1 and 20:1 by weight, or 3:1 and 12:1 by volume.
9508	- Primer: PAINT-10038 (PPG Amerlock 2 VOC, gray anthracite RAL 7016) DFT Mean thickness: 5 mils to 9 mils
9509 REVA	Refer to Paint control plan for other requirement such as adhesion testing Primer: PAINT-10039 (PPG Amerlock 2 VOC, beige red RAL 3012) DFT Mean thickness: 0.8 mils to 2 mils Refer to Paint control plan for other requirement such as adhesion testing.
9510	RoHS compliant alkaline Zinc-Nickel finish, 12%-15% Nickel content, minimum thickness of Zinc-Nickel coating to be 12 microns, clear or black trivalent chromate conversion coating. Bake for hydrogen embrittlement relief per ASTM B 850.
9511	Magni 565 - Chrome free duplex coating. RoHS compliant.
9512	Zinc corrosion protection according to GM specification GMW3044 Sub-specification 6K96/48
9513	High solids epoxy coating, color light grey, which meets 250-500 hour salt spray requirement per ASTM B117.
9514	Zinc corrosion protection according to GM specification GMW3044 Subspecification 8K240/120 with passivation.
9515	Mask areas per drawing. Apply two coats of zinc chromate primer per TT-P-1757, Color Y.
9516	-Primer: PAINT-10042 (PPG Amerlock 2 VOC, jet black RAL 9005) DFT thickness: 5.0 mils to 9.0 mils Refer to Paint Control plan for other requirement such as adhesion testing.
9517	PASSIVATE PER AMS2700 METHOD 1 TYPE 8 CLASS 2.

9518 REVA -Primer:

HUTCHINSON 82 South Street Hopkinton, MA 01748 88

PAINT-10040 (PPG Amerlock 2 VOC, PEARL GREY)

DFT thickness: 4.0 mils to 5.0 mils

Refer to Paint Control plan for other requirement such as adhesion testing.

9519 REVA -Primer:

PAINT-10040 (PPG Amerlock 2 VOC, PEARL GREY)

DFT thickness: 4.0 mils to 5.0 mils

-Top coat:

PAINT-20023 (Amercoat 450H, TRAFFIC WHITE RAL 9016)

High gloss

DFT thickness 2 to 3 mils

Refer to Paint Control plan for other requirement such as adhesion testing.

9520 Hard anodize in accordance with MIL-A-8625, Type III, Class 1 or SAE AMS2469, with no seal.

Anodize in accordance with MIL-A-8625, Type II, Class 1 or SAE AMS2471, 9521 REVA using TCP or Hexavalent chrome-free sealer.

9522 Aluminum conversion coating per MIL-DTL-5541, Type II, Class 3 RoHS compliant, color clear.

- 9523 A. Prior to prime and paint, chemically coat in accordance with MIL-DTL-5541, Type II, Class 3 except isolators and hardware.
  - В. All exterior surfaces, except isolators and hardware: Apply one (1) coat of primer TT-P-1757, Type I, Class C, Color Y. The primer shall have a dry film thickness of .001-.002. Apply two (2) coats of light gray enamel paint per MIL-DTL-15090 (Navy formula NO. 111). Each coat of paint shall have a minimum of .0025 dry film thickness.
- 9524 Passivate per ASTM A 967, nitric 2 solution, or SAE AMS2700, method 1, type 6, class 1.
- 9525 - Primer:

PAINT-10033 (Arkote 31)

(For Reference only WFT Mean thickness: 3.9 mils to 5.5 mils)

DFT Mean thickness: 1.6 to 2.4 mils

-Top Coat:

PAINT-20029 (Arkote 110 HES grey-RAL 7012)

(For Reference only WFT Mean thickness: 5.5 mils to 7.9 mils)

DFT Mean thickness: 2.4 mils to 5.5 mils

Gloss<15GU

Total DFT mean thickness comprised between 4 mils and 7.9 mils

Refer to Paint control plan for other requirement such as adhesion testing.

Metal Prep and Painting of High Capacity Mounts per General Dynamics Electric Boat 9526

HUTCHINSON 82 South Street Hopkinton, MA 01748

Division Specification 3092. A copy of specification 3092 can be obtained from the Technical Review Group. EB 3092 is at revision H at the time of this release. Similar to Finish 9441 with different top coat.

- A. If parts are molded, remove any loose flash.
- B. Clean all metal surfaces to remove grease, oil and other contaminants.
- C. Mask threads and any other mating surfaces as indicated per drawing. Threads and mating surfaces are to be paint free per E Boat drawings H155-2001 and -9002 note 7010 and H155-9003 note 7006.
- D. Blast exposed metal surfaces to near-white metal. The blast profile shall remove all evidence of machining lines and be at least 1 mil deep, but shall not exceed 3mils deep.
- E. Paint all exposed metal surfaces as soon as practical before rusting occurs.
- F. The paint system shall be applied to the ID of bolt holes and internal surfaces of sleeves but only to the extent that no bare metal exists. Paint thickness shall not adversely affect mount assembly.
- G. The finish shall be a two coat epoxy paint system in accordance with MIL-P-24441, Type IV. Total finish thickness shall be 8 mils minimum.
- H. Primer shall be MIL-DTL-24441, Type IV, Formula 150 Green Primer, approximately 4 mils thick.
- I. Topcoat shall be MIL-DTL-24441, Type IV, Formula 151 GRAY, approximately 4 mils thick. Topcoat color shall be GRAY and approximately the same as MIL-P-24441, Type IV, Formula 151, which matches FED-STD-595 color chip #26270.
- J. The Primer and Topcoat can be purchased from Ameron International Performance Coating & Finishing Group. The Primer is typically provided in a 5 gallon bucket containing Component A (p/n 67005763) and Component B (p/n 67005764) premixed. The Hutchinson designation is PAINT-10023. The Topcoat is typically provided in a 5 gallon bucket containing Component A (p/n 67005801) and Component B (p/n 67005802) premixed. The Hutchinson designation is PAINT-20003.
- K. The total minimum dry film thickness shall be 8 mils. To verify the setup, measure the thickness on the startup part or witness sample in accordance with ASTM D1186. In process validation inspection sampling plan to be as follows (see EB 3092 for higher quantities):

	Lot Size	Sample Size	Max Unacceptable to Accept Lot	Min Unacceptable to Reject Lot
2	25	3	0	1
26	90	13	1	2
91	150	20	2	3

exceed 1/4 inch total.

	exceed 74 fileli total.
9527	PAINT-10045 (PPG Amerlock 2 VOC, traffic white RAL 9016) DFT Mean thickness: 0.8 mils to 2 mils Refer to Paint control plan for other requirement such as adhesion testing.
9528	PAINT-10046 (PPG Amerlock 2AL, aluminium RAL 9006) DFT Mean thickness: 5 mils to 9 mils Refer to Paint control plan for other requirement such as adhesion testing.
9529	-Primer: PAINT-10039 (PPG Amerlock 2 VOC, beige red RAL 3012) DFT Mean thickness: 3.2 mils minimum (80 microns minimum) Refer to Paint control plan for other requirement such as adhesion testing.
9530	-Primer: PAINT-10039 (PPG Amerlock 2 VOC, beige red RAL 3012) DFT Mean thickness: 3.2 mils minimum (80 microns minimum) -Top Coat: PAINT-10042 (PPG Amerlock 2 VOC, jet black RAL 9005) DFT Mean thickness: 5.5 mils minimum (140 microns minimum) (total thickness 8.7 mils minimum – 220 microns minimum) Refer to Paint control plan for other requirement such as adhesion testing.
9531	Passivate Per MIL-DTL-14072, Type 1
9532	Zinc Plate Per ASTM B633, FE/ZN 5, Type III. Final finish with Trivalent Chromate only. No Hexavalent Chromate allowed. This finish is to be RoHS compliant.
9533	Apply one coat epoxy primer per MIL-PRF-23377 Type I, Class N. Apply one coat topcoat per MIL-PRF-85285, Type I, Class H, color gray No. 36231 per SAE AMS-STD-595. Apply primer and topcoat in accordance with Raytheon specification RPR 17003 Type III Class B.
9534	Chemical conversion coating per MIL-DTL-5541, Class 1A, Type II, applied to all surfaces before primer and paint.  Primer per MIL-PRF-23377: Type I, Class N.  Paint per MIL-PRF-85285; Type I, Class H. Color = Gloss Black (Color number 17038) per AMS-STD-595.
9535	Passivate per AMS2700, Method 1, Type 2 or 8, Class 1

L. For larger mounts rated for 450 pounds or larger, uniform paint overlap of 1/8 inch is acceptable. Paint overlap in excess of 1/8 inch shall be irregular up to but not to

FINISH LOG EFFECTIVITY DATE	AFFECTED FINISH NUMBER	REVISION OF FINISH	ECO NUMBER OR NEW FINISH
6/3/2020	9535	NONE	NEW
2/28/2020	9534	NONE	NEW
11/21/2019	9533	NONE	NEW
8/16/2019	9521	Α	ECO 1907005
6/12/2019	9102	Α	ECO 1905016
4/3/2019	6025	Α	ECO 1902012
3/25/2019	9153	В	ECO 1902005
3/5/2019	9532	NONE	NEW
1/8/2019	9531	NONE	NEW
11/27/2018	9351	Α	ECO 1811012
8/3/2018	9303	Α	ECO 1803010
6/13/2018	6025	NONE	NEW
5/23/2018	9483	В	ECO 1805011
5/23/2018	9482	В	ECO 1805011
5/16/2018	7038	А	ECO 1804006
3/19/2018	9530	NONE	NEW
3/19/2018	9529	NONE	NEW
2/28/2018	9528	NONE	NEW
2/28/2018	9527	NONE	NEW
2/28/2018	9525	NONE	NEW
1/26/2018	9526	NONE	NEW
10/11/2017	9524	NONE	NEW
9/27/2017	9523	NONE	NEW
6/19/2017	9326	А	ECO 1705013
5/8/2017	726	Α	ECO 1705001
5/3/2017	9522	NONE	NEW
3/13/2017	9521	NONE	NEW
3/13/2017	9520	NONE	NEW
12/6/2016	9519	Α	ECO 1611015
12/6/2016	9518	Α	ECO 1611006
10/17/2016	9519	NONE	NEW
10/17/2016	9518	NONE	NEW
6/10/2016	9517	NONE	NEW
5/27/2016	9516	NONE	NEW

1 V 1 1	ty Date:6/3/2020,	SEE UPDATED	LOG PAGE 92	
	FINISH LOG	AFFECTED	REVISION OF	ECO NUMBER OR NEW FINISH
	EFFECTIVITY DATE	FINISH NUMBER	FINISH	
$\perp$				
L	12/31/2015	659	А	ECO 1511018
L	12/31/2015	669	А	ECO 1511018
L	12/31/2015	797	А	ECO 1511018
	12/31/2015	805	В	ECO 1511018
L	12/31/2015	806	А	ECO 1511018
L	12/31/2015	808	А	ECO 1511018
L	12/31/2015	809	С	ECO 1511018
L	12/31/2015	812	С	ECO 1511018
	12/31/2015	826	С	ECO 1511018
	12/31/2015	827	С	ECO 1511018
	12/31/2015	836	С	ECO 1511018
	12/31/2015	841	С	ECO 1511018
	12/31/2015	843	С	ECO 1511018
	12/31/2015	852	С	ECO 1511018
	12/31/2015	861	Α	ECO 1511018
	12/31/2015	862	Α	ECO 1511018
	12/31/2015	864	А	ECO 1511018
	12/31/2015	865	Α	ECO 1511018
	12/31/2015	8001	В	ECO 1511018
	12/31/2015	8007	Α	ECO 1511018
	12/31/2015	8008	Α	ECO 1511018
	12/31/2015	8010	А	ECO 1511018
	12/31/2015	8018	А	ECO 1511018
	12/31/2015	8022	А	ECO 1511018
	12/31/2015	8024	А	ECO 1511018
	12/31/2015	8025	А	ECO 1511018
	12/31/2015	8026	Α	ECO 1511018
	12/31/2015	8027	А	ECO 1511018
	12/31/2015	8037	Α	ECO 1511018
	12/31/2015	8039	Α	ECO 1511018
	12/31/2015	8044	Α	ECO 1511018
	12/31/2015	9375	А	ECO 1511018
	12/31/2015	9401	А	ECO 1511018
	12/31/2015	9456	А	ECO 1511018
	12/31/2015	9494	Α	ECO 1511018
1				

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FINISH LOG	AFFECTED	REVISION OF	ECO NUMBER OR NEW FINISH
EFFECTIVITY DATE	FINISH NUMBER	FINISH	
44/20/2045		6	500 4500007
11/30/2015	9202	C	ECO 1509007
10/8/2015	9515	NONE	NEW
10/1/2015	9514	NONE	NEW
9/23/2015	9513	NONE	NEW
8/26/2015	9441	Α	ECO 1505009
8/19/2015	9512	NONE	NEW
7/13/2015	9501	А	ECO 1506006
7/1/2015	9450	А	ECO 1504022
6/19/2015	9511	NONE	NEW
5/21/2015	9509	А	ECO 1505002
3/25/2015	9510	NONE	NEW
3/3/2015	9508	NONE	NEW
3/3/2015	9509	NONE	NEW
1/23/2015	9507	NONE	NEW
12/19/2014	9453	А	ECO 1412016
12/18/2014	9506	NONE	NEW
12/12/2014	9505	NONE	NEW
12/11/2014	9504	NONE	NEW
11/20/2014	9503	NONE	NEW
11/10/2014	816	С	ECO 1410013
11/10/2014	9500	Α	ECO 1410015
10/29/2014	9497	В	ECO 1410019
10/24/2014	9501	NONE	NEW
10/24/2014	9502	NONE	NEW
9/17/2014	9500	NONE	NEW
8/28/2014	9492	NONE	NEW
7/8/2014	9499	NONE	NEW
5/5/2014	9498	NONE	NEW
3/21/2014	9497	NONE	NEW
3/17/2014	9496	NONE	NEW
2/26/2014	9495	NONE	NEW
1/31/2014	9446	Α	ECO 1301003
1/31/2014	9362	В	ECO 1301003
1/17/2014	9494	NONE	NEW
10/23/2013	9493	NONE	NEW
10/23/2013	J 7733		

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FINISH LOG EFFECTIVITY DATE	AFFECTED FINISH NUMBER	REVISION OF FINISH	ECO NUMBER OR NEW FINISH
10/5/0010			
12/7/2012	9490	NONE	NEW
12/7/2012	9491	NONE	NEW
6/6/2012	8036	Α	ECO 1205003
6/6/2012	9282	А	ECO 1205003
6/6/2012	9296	А	ECO 1205003
6/6/2012	9319	В	ECO 1205003
6/6/2012	9320	С	ECO 1205003
6/6/2012	9328	А	ECO 1205003
6/6/2012	9346	А	ECO 1205003
6/6/2012	9353	А	ECO 1205003
6/6/2012	9378	В	ECO 1205003
6/6/2012	9410	А	ECO 1205003
6/6/2012	9457	А	ECO 1205003
5/18/2012	9310	В	ECO 1203015
4/12/2012	9485	А	ECO 1201005
3/29/2012	9489	NONE	NEW
3/29/2012	9488	NONE	NEW
3/2/2012	9487	NONE	NEW
1/23/2012	9486	NONE	NEW
12/22/2011	9485	NONE	NEW
12/22/2011	9483	Α	ECO 1112006
12/22/2011	9482	А	ECO 1112006
12/19/2011	601	Α	ECO 1110011
9/2/2011	9484	NONE	NEW
8/1/2011	9483	NONE	NEW
8/1/2011	9482	NONE	NEW
5/9/2011	9481	NONE	NEW
5/26/2010	9475	А	ECO 1005018
5/26/2010	9480	NONE	NEW
5/19/2010	9479	NONE	NEW
5/19/2010	9478	NONE	NEW
5/19/2010	9477	NONE	NEW
5/19/2010	9476	NONE	NEW
5/10/2010	9475	NONE	NEW
5/10/2010	8044	NONE	NEW
9/30/2009	9474	NONE	NEW
3/30/2003	1 3.7.1	95	17277

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FINISH LOG EFFECTIVITY DATE	AFFECTED FINISH NUMBER	REVISION OF FINISH	ECO NUMBER OR NEW FINISH
8/19/2009	9037	В	ECO 0905013
8/13/2009	8043	NONE	NEW - ECO 0904025
8/13/2009	9473	NONE	NEW - ECO 0904025
3/23/2009	9469	NONE	NEW - ECO 0811001
3/17/2009	9472	NONE	NEW
3/17/2009	9471	NONE	NEW
3/17/2009	9470	NONE	NEW
2/18/2009	920	А	ECO 0803042
2/11/2009	9468	NONE	NEW
2/11/2009	9467	NONE	NEW
7/28/2008	9466	NONE	NEW
4/3/2008	9465	NONE	NEW
2/4/2008	9464	NONE	NEW
11/12/2007	9463	NONE	NEW
7/12/2007	9462	NONE	NEW