NOTES:

1. APPLICABLE STANDARDS/SPECIFICATIONS:
   A. ASME Y14.100-2000
   B. ASME Y14.5M-1994

2. GENERAL:
   A. THIS DRAWING ESTABLISHES THE MINIMUM PAINTING REQUIREMENTS FOR CHEMICAL AGENT RESISTANT COATINGS (CARC) AND COMMERCIAL COATINGS FOR VEHICLES.
   B. UNLESS OTHERWISE SPECIFIED, THE FINISHING PROCESSES AND MATERIALS SHALL BE SELECTED BY THE CONTRACTOR AS SPECIFIED ON THIS DRAWING AND WILL BE SELECTED FROM THE APPLICABLE STATED METHOD(S). THE CONTRACTOR IS RESPONSIBLE TO ASSURE THAT THE SELECTED MATERIALS IS USED IN THE COATING SYSTEM ARE COMPATIBLE.
   C: CARC PAINT FINISHES: BASIC PAINT FINISHES SHALL MEET THE REQUIREMENTS OF MIL-DTL-53072 FOR STEEL, ALUMINUM AND NON-FERROUS METALS.
   D. SURFACES NOT TO BE REPAINTED: UNLESS OTHERWISE SPECIFIED PAINTING MAY NOT BE REQUIRED ON CERTAIN TYPES OF SURFACES SUCH AS FABRICS, PLASTICS RUBBER, GLASS, AND METAL PARTS NOT REQUIRING CORROSION PROTECTION OR WHERE PAINT INTERFERES WITH FUNCTION, AND SURFACES SPECIFICALLY INTENDED FOR ELECTRICAL CONTACT, HEAT TRANSMISSION OR TIGHT TOLERANCE. SURFACES NOT PAINTED SHALL BE TREATED TO PROVIDE A NON REFLECTIVE SURFACE, UNLESS THE SURFACE IS NOT VISIBLE WHEN VIEWING THE VEHICLE'S EXTERIOR IN A NORMAL OPERATING CONDITION.
   E. THE USE OF A SILICONE BASE PRODUCTS FOR LUBRICATION OR SURFACE COATING IS PROHIBITED WITHOUT PRIOR APPROVAL IN WRITING FROM THE VEHICLE MANUFACTURER AND CONTRACTING OFFICER.
   F. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONAL LIMITS APPLY BEFORE PLATING OR FINISHING OPERATIONS.

3. APPLICATION:
   A. PREPARATION OF A SURFACE: UNLESS OTHERWISE SPECIFIED, PRIOR TO ANY TREATMENT OR PAINTING, ALL SURFACES SHALL BE FREE OF ALL SOIL IMPURITIES , CORROSION, GREASE, OIL, SOLDER FLUX, WELDING FLUX, WELD SPATTER, SAND, RUST, SCALE OR OTHER FOREIGN MATTER THAT INTERFERES WITH THE COATING SYSTEM. CLEANING SHALL BE DONE IMMEDIATELY BEFORE ANY TREATMENT OR PAINTING. PRECAUTIONS SHALL BE TAKEN TO ENSURE THAT SURFACES REMAIN CLEAN AND DRY UNTIL THEY ARE TREATED OR PAINTED. THE USE OF UNIHIBITED ALKALINE MATERIAL, SUCH AS SODIUM HYDROXIDE SOLUTION, OR ABRASIVES , SUCH AS IRON OXIDE ROUGE, OR STEEL WOOL, THAT ACCELERATE CORROSION OF ALUMINUM ALLOY SURFACES IS PROHIBITED.
   B. PAINT APPLICATION: PRE-TREATMENT, PRIMER AND TOP COAT SHALL BE APPLIED IAW MANUFACTURER'S INSTRUCTIONS FOR MIXING, APPLICATION AND CURING TO MAXIMIZE COATING QUALITY.
   C. TIME OF APPLICATION: PRIMER SHALL BE APPLIED PROMPTLY AFTER PRE TREATMENT AND CLEANING, NOT TO EXCEED 24 HOURS AFTER THE SURFACE HAS BEEN PREPARED FOR PAINTING EXCLUDING ALUMINUM AND ALUMINUM ALLOYS TREATED IAW MIL-C-5541. TOPCOAT SHALL BE APPLIED TO PRIMER IAW PRIMER SPECIFICATION REQUIREMENTS.

4. HEALTH, SAFETY AND ENVIRONMENTAL REGULATIONS:
   A. PAINT QUALIFICATION: THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL APPLICABLE ENVIRONMENTAL REGULATIONS FOR THE STATED PROCESS. WHEN IT IS NECESSARY TO MODIFY THE CERTIFIED PAINT, SUBJECT PAINT WILL BE RE-QUALIFIED. THE ACTIVITY RESPONSIBLE FOR THE CARC QUALIFIED PRODUCT LIST IS THE U.S. ARMY BELVOIR RESEARCH AND DEVELOPMENT CENTER, ATTN:STRBE-VO, FORT BELVOIR, VA 22060.
   B. HIGH TEMPERATURE PAINT: SURFACES ATTAINING AN OPERATING TEMPERATURE OF 400° F OR GREATER MUST BE PAINTED WITH HEAT RESISTANT PAINT IAW COATING REQUIREMENT METHOD 6.

5. APPLICABLE COATING COLOR CHIP NUMBERS REFERENCED FOR THE STATED COATING METHODS ON THIS REQUIREMENT SHALL BE IAW FED-STD-595.

6. ONE(1) mil = 1/1000 IN. (1.0 mil = 0.001 IN.)

METHODS

METHOD 1: IRON AND STEEL SURFACES REQUIRING A POLYURETHANE TOPCOAT WITH AN E-COAT PRIMER FOR EXTERIOR AND/OR INTERIOR EXPOSURE.

- 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-C-46168, MIL-C-53039 OR MIL-DTL-64159 DRY FIM THICKNESS IAW MIL-DTL-53072 COLOR #34094 LUSTERLESS #383 GREEN

METHOD 2: ALUMINUM AND ALUMINUM ALLOY SURFACES REQUIRING A POLYURETHANE TOPCOAT WITH AN E-COAT PRIMER FOR EXTERIOR AND/OR INTERIOR EXPOSURE.

- CLEAN AND TREAT: IAW MIL-C-5541
- OPTIONAL ANODIZE: IAW MIL-A-8625
- 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-C-46168, MIL-C-53039 OR MIL-DTL-64159 DRY FILM THICKNESS IAW MIL-DTL-53072 COLOR #34094 LUSTERLESS #383 GREEN

METHOD 3: ALUMINUM AND ALUMINUM ALLOY SURFACES WITH AN E-COAT PRIMER NOT REQUIRING A POLYURETHANE TOPCOAT.

- CLEAN AND TREAT: IAW MIL-P-53084
- OPTIONAL ANODIZE: IAW MIL-A-8625
- 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.

METHOD 4: IRON AND STEEL SURFACES REQUIRING A POLYURETHANE TOPCOAT WITH A NON E-COAT PRIMER FOR EXTERIOR AND/OR INTERIOR EXPOSURE. METHOD 1 MAY BE SUBSTITUTED FOR METHOD 4.

- 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-C-46168, MIL-C-53039 OR MIL-DTL-64159 DRY FILM THICKNESS IAW MIL-DTL-53072 COLOR #34094 LUSTERLESS #383 GREEN

METHOD 5: GALVANIZED STEEL SURFACES REQUIRING A POLYURETHANE TOPCOAT FOR EXTERIOR AND INTERIOR EXPOSURE.

- CLEAN: IAW TT-C-490 METHOD OPTIONAL.
- PRETREAT: IAW TT-C-490 TYPE I
- PRIMER: IAW MIL-P-53084 DRY FILM THICKNESS 1.0-1.2 mil
- OPTIONAL: IAW GM9984070, GM9984017, GM9984094 OR A-A-52474 COLOR SEMIGLOSS WHITE, GRAY OR BLACK.
- TOPCOAT: PAINT MIL-C-46168, MIL-C-53039 OR MIL-DTL-64159 DRY FILM THICKNESS IAW MIL-DTL-53072 COLOR #34094 LUSTERLESS #383 GREEN

METHOD 6: IRON, STEEL AND ALUMINUM SURFACES REQUIRING A HEAT RESISTING COATING THAT EXPERIENCE TEMPERATURES OF 400° OR GREATER

- TOPCOAT: IAW PAINT MIL-P-14105 DRY FILM THICKNESS 1.5 - 2.5 mil COLOR #34094 LUSTERLESS #383 GREEN OR #37030 LUSTERLESS BLACK

METHOD 7: SURFACES THAT DO NOT REQUIRE A POLYURETHANE TOPCOAT BUT MUST HAVE A PROTECTIVE CORROSION RESISTANT FINISH FOR INTERIOR AND EXTERIOR EXPOSURE.

- FINISH: THE COMPONENT SHALL BE COROSIVE 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 PLACEMENT OF DAMAGED FINISH) TO KEEP THE CORROSION PREVENTION IN EFFECT. THE COLOR OF THE FINISH IS OPTIONAL OR WITHIN THE SPECIFICATIONS OF THE COMPONENT. THIS WILL INSURE THE MATERIAL/FINISH TO TEN (10) YEARS IN A MILITARY ENVIRONMENT.
- APPLICATION: IAW BEST COMMERCIAL/PAINT MANUFACTURER'S IMETHOD COLOR OPTIONAL: #34094 LUSTERLESS #383 GREEN OR #37030 LUSTERLESS BLACK ARE PREFERRED ADHESION IAW TT-C-490 NON-CARC REQUIREMENTS.

METHOD 8: THIS METHOD INTENTIONALLY LEFT BLANK

METHOD 9: POLYURETHANE TOPCOAT SURFACES REQUIRING A NON SLIP COATING FOR EXTERIOR AND INTERIOR EXPOSURE.

- TOPCOAT: IAW MIL-C-53039 WITH SHERWIN-WILLIAMS P/N X90AS4377 GRIT MIX RATIO 1 POUND PER GALLON DRY FILM THICKNESS IAW MIL-DTL-53072 COLOR #34094 LUSTERLESS #383 GREEN

METHOD 10: ALUMINUM AND ALUMINUM ALLOY VESSELS REQUIRING A POLYURETHANE TOPCOAT WITH A NON E-COAT PRIMER FOR EXTERIOR AND INTERIOR EXPOSURE. METHOD 2 MAY BE SUBSTITUTED FOR METHOD 10 EXTERIOR SURFACES

- CLEAN AND CONDITION FOR INTERIOR VESSEL SURFACES: IAW MIL-C-10578
- CLEAN AND PRETREAT FOR EXTERIOR SURFACES: IAW MIL-C-5541, MIL-A-8625 IAW TT-C-490 TYPE III, IAW DOD-P-15328 DRY FILM THICKNESS: IAW MIL-DTL-53072.
- PRIMER: IAW MIL-P-53022, MIL-P-53030 OR MIL-PRF-23377 DRY FILM THICKNESS IAW MIL-DTL-53072 COLOR #27875 SEMIGLOSS WHITE
- TOPCOAT: IAW MIL-C-46168, MIL-C-53039 OR MIL-DTL-64159 DRY FILM THICKNESS IAW MIL-DTL-53072 COLOR #34094 LUSTERLESS #383 GREEN

METHOD 11: ALUMINUM AND ALUMINUM ALLOY SURFACES REQUIRING A POLYURETHANE TOPCOAT WITH A NON E-COAT PRIMER FOR INTERIOR EXPOSURE.

- CLEAN AND TREAT: IAW MIL-C-5541
- OPTIONAL ANODIZE: IAW MIL-A-8625
- PRIMER: IAW MIL-P-53022, MIL-P-53030 OR MIL-PRF-23377 DRY FILM THICKNESS IAW MIL-DTL-53072 COLOR #27875 SEMIGLOSS WHITE
- TOPCOAT: IAW MIL-PRF-22750, TYPE I DRY FILM THICKNESS IAW MIL-DTL-53072 COLOR #24533 SEMIGLOSS GREEN

METHOD 12: POLYURETHANE TOPCOAT SURFACES REQUIRING LETTER AND NUMBER MARKINGS FOR EXTERIOR EXPOSURE.

- TOPCOAT: IAW MIL-C-46168, MIL-C-53039 OR MIL-DTL-64159 DRY FILM THICKNESS IAW MIL-DTL-53072 COLOR #37030 LUSTERLESS BLACK WHEN APPLIED ON COLOR # 34094 LUSTERLES #383 GREEN BASE COAT OR COLOR #30051 LUSTERLESS # 383 BROWN WHEN APPLIED ON LUSTERLESS BLACK CAMOFLAGED AREA.

METHOD 13: COMPOSITE OR PLASTIC SURFACES REQUIRING A POLYURETHANE TOPCOAT ONLY FOR EXTERIOR AND INTERIOR EXPOSURE.

- CLEAN: IAW TT-C-490, METHOD OPTIONAL OR IAW MIL-PRF-62419
- TOPCOAT: IAW MIL-C-46168, MIL-C-53039 OR MIL-DTL-64159 DRY FILM THICKNESS IAW MIL-DTL-53072 COLOR # 34094 LUSTERLES #383 GREEN

METHOD 14: ALUMINUM OR ALUMINUM ALLOY SURFACES FOR INTERIOR EXPOSURE THAT ARE TO BE ADHESIVELY BONDED AND REQUIRE A NON E-COAT PRIMER AND AN EPOXY TOPCOAT.

- CLEAN AND PRETREAT: IAW ASTM E864 OR E866.
- OPTIONAL: IAW MIL-DTL-53072 AND DOD-P-15328
- OPTIONAL: IAW MIL-C-5541
- OPTIONAL: IAW MIL-A-8625
- PRIMER: IAW MIL-PRF-23377, MIL-P-53030 OR MIL-P-53022 DRY FILM THICKNESS IAW MIL-DTL-53072.
- TOPCOAT: IAW MIL-PRF-22750. DRY FILM THICKNESS IAW MIL-DTL-53072 COLOR # 24533 SEMIGLOSS GREEN

METHOD 15: ALUMINUM OR ALUMINUM ALLOY SURFACES FOR EXTERIOR EXPOSURE THAT ARE TO BE ADHESIVELY BONDED AND REQUIRE A NON E-COAT PRIMER AND A POLYURETHANE TOPCOAT.

- CLEAN AND PRETREAT: IAW ASTM E864 AND E866.
- OPTIONAL: IAW MIL-DTL-53072 AND DOD-P-15328
- OPTIONAL: IAW MIL-C-5541
- OPTIONAL: IAW :MIL-A-8625
- PRIMER: IAW MIL-PRF-23377, MIL-P-53030 OR MIL-P-53022 DRY FILM THICKNESS IAW MIL-DTL-53072.
- TOPCOAT: IAW MIL-DTL-53072 USE PAINT MIL-C-46168, MIL-C-53039 OR MIL-DTL-64159 DRY FILM THICKNESS IAW MIL-DTL-53072 COLOR # 383 GREEN

REVISIONS

MODEL REV	DRAWING REV	ZONE	DESCRIPTION	DATE(YEAR-MO-DA)	APPROVED
D	D		REDRAWN WITH CHANGES TO PRO/E		
		H8	1) REVISED NOTE 1		
		G8	2) REVISED NOTE 2		
		H6	3) REVISED METHOD 1		
		G6	4) REVISED METHOD 2		
		F6	5) REVISED METHOD 3		
		F6	6) REVISED METHOD 4		
		E6	7) REVISED METHOD 5		
		D6	8) REVISED METHOD 6		
		C6	9) REVISED METHOD 7		
		H3	10) REVISED METHOD 9		
		G3	11) REVISED METHOD 10		
		F3	12) REVISED METHOD 11		
		F3	13) REVISED METHOD 12		
		E3	14) REVISED METHOD 13		
		E3	15) REVISED METHOD 14		
		D3	16) REVISED METHOD 15		
		G5	17) REVISED METHOD 2, MIL-C-5541 WAS SAE-AMS-C-5541, MIL-A-8625 WAS SAE-AMS-A-8625.		
		F5	18) REVISED METHOD 3, MIL-A-8625 WAS SAE-AMS-A-8625,		
		C5	19) REVISED METHOD 7 ADDED FINISH NOTE		
		G3	20) REVISED METHOD 10, MIL-C-5541 WAS SAE-AMS-C-5541, MIL-A-8625 WAS SAE-AMS-A-8625. MIL-PRF-23377 WAS MIL-P-23377		
		F3	21) REVISED METHOD 11, MIL-C-5541 WAS SAE-AMS-C-5541, MIL-A-8625 WAS SAE-AMS-A-8625. MIL-PRF-23377 WAS MIL-P-23377.		
		D3	22) REVISED METHOD 14, MIL-C-5541 WAS SAE-AMS-C-5541, MIL-A-8625 WAS SAE-AMS-A-8625. MIL-PRF-23377 WAS MIL-P-23377.		
		C3	23) REVISED METHOD 15, MIL-C-5541 WAS SAE-AMS-C-5541, MIL-A-8625 WAS SAE-AMS-A-8625. MIL-PRF-23377 WAS MIL-P-23377		
			24) ADDED NOTE 2F		
			ERR SSS-U7474	2004-02-04	W.CHURCH FM, SEW

THIS DRAWING WAS GENERATED FROM A SOLID MODEL AND IS CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

PART NO. 12420325

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PMIC A

MECHANICAL PROPERTIES: YP, TS, EL2, RA, BH, RH

NEXT ASSY	USED ON
	FMTV

APPLICATION

DO NOT SCALE DRAWING

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

TOLERANCES ON ANGLES ± °
2 PLACE DECIMALS ±
3 PLACE DECIMALS ±

THIRD ANGLE PROJECTION

MATL ENGR: T.BRUSTER
MODELED BY: F.LEMANSKI

CONTRACT NUMBER: DAAE07-92-C-R001
CONTRACTOR: STEWART & STEVENSON SERVICES
DRAWN BY: G.SCHMIDT — DATE (YR-MO-DA): 93-02-11
CHECKER: R.MARGOLIS — ENGINEER: D.CHRISTIANSON
ENGINEER: ENGINEER,2 — QUALITY ENGINEER: P.FIESTER
DRAWING APPROVAL: W.GRAY
DESIGN APPROVAL: P.MOTZENBECKER

DESIGN ACTIVITY: US ARMY TANK AUTOMOTIVE & ARMAMENTS COMMAND WARREN, MICHIGAN 48397-5000

TREATMENT AND FINISH REQUIREMENTS FMTV

SIZE: E — CAGE CODE: 19207 — DWG NO: 12420325
SCALE: 1/3 — UNIT WT: 0.000 lbs REF — SHEET 1 OF 1

NSN NSN