



# **STANDARD OVERHAUL PRACTICES MANUAL**

## **CLEANING MATERIALS**

**PART NUMBER  
NONE**

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## STANDARD OVERHAUL PRACTICES MANUAL

Revision No. 52  
Jul 01/2009

To: All holders of CLEANING MATERIALS 20-60-01.

Attached is the current revision to this STANDARD OVERHAUL PRACTICES MANUAL

The STANDARD OVERHAUL PRACTICES MANUAL is furnished either as a printed manual, on microfilm, or digital products, or any combination of the three. This revision replaces all previous microfilm cartridges or digital products. All microfilm and digital products are reissued with all obsolete data deleted and all updated pages added.

For printed manuals, changes are indicated on the List of Effective Pages (LEP). The pages which are revised will be identified on the LEP by an R (Revised), A (Added), O (Overflow, i.e. changes to the document structure and/or page layout), or D (Deleted). Each page in the LEP is identified by Chapter-Section-Subject number, page number and page date.

Pages replaced or made obsolete by this revision should be removed and destroyed.

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TRANSMITTAL LETTER

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## STANDARD OVERHAUL PRACTICES MANUAL

Location of Change

Description of Change

NO HIGHLIGHTS

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All revisions to this manual will be accompanied by transmittal sheet bearing the revision number. Enter the revision number in numerical order, together with the revision date, the date filed and the initials of the person filing.

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## STANDARD OVERHAUL PRACTICES MANUAL

### INTRODUCTION

#### 1. General

- A. The instructions in this manual tell how to do standard shop procedures during maintenance functions from simple checks and replacement to complete shop-type repair.
- B. This manual is divided into separate sections:
  - (1) Title Page
  - (2) Transmittal Letter
  - (3) Highlights
  - (4) Effective Pages
  - (5) Contents
  - (6) Revision Record
  - (7) Record of Temporary Revisions
  - (8) Introduction
  - (9) Procedures
- C. Refer to SOPM 20-00-00 for a definition of standard industry practices, vendor names and addresses, and an explanation of the True Position Dimensioning symbols used.
- D. The data is general. It is not about all situations or specific installations. Use it as a guide to help you write minimum standards.
- E. If the component overhaul instructions are different from the data in this subject, use the component overhaul instructions.

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INTRODUCTION

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## STANDARD OVERHAUL PRACTICES MANUAL

### CLEANING MATERIALS

#### 1. INTRODUCTION

- A. Cleaning materials identified in the overhaul instructions are in this list.
- B. Vendor product names and numbers are given for these cleaning materials along with applicable Boeing, Military or Federal Specification numbers. Refer to SOPM 20-00-00 for a list of all the vendor names and addresses.

NOMENCLATURE	SPECIFICATION	RECOMMENDED MATERIALS/VENDORS
Acid Brighteners for Aluminum	MIL-S-5410	Cee Bee B-4, V71361 Kelite L-20, V89138 Turco 3002, V61102 Turco 3286, V61102 Turco 4461, V61102 Smut-Go No. 4, V61102
Adhesive Solvent, Nameplate	MIL-O-T-634	Therma-Sol, V01335
Adhesive Strippers for use on Adhesives BMS 5-10, 5-24, 5-70		Arnold Formula 99CE, V0166B Strip Jel 900, V75554
Alkaline Abrasive Cleaner for Exterior Painted or Unpainted Metal Surfaces		Cee Bee Majorclean, V71361
Alkaline Cleaners		
Heavy Duty Soak	BAC5749 (formerly Category A)	Refer to SOPM 20-30-03
Heavy Duty Spray	BAC5749 (formerly Category M)	Refer to SOPM 20-30-03
Medium Duty Soak/Electrolytic	BAC5749 (formerly Categories B and K)	Refer to SOPM 20-30-03
Medium Duty Soak	BAC5749 (formerly Categories C, CL, D, DL)	Refer to SOPM 20-30-03
Light Duty Soak	BAC5749 (formerly Categories E, F, FL)	Refer to SOPM 20-30-03
Caustic Soak	BAC5749 (formerly Category G)	Refer to SOPM 20-30-03
Light Duty Spray	BAC5749 (formerly Categories H and J)	Refer to SOPM 20-30-03
Electrolytic	BAC5749 (formerly Category KC)	Refer to SOPM 20-30-03

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NOMENCLATURE	SPECIFICATION	RECOMMENDED MATERIALS/VENDORS
Manual Cold	BAC5744	Calla 301, V19457 Calla 301A, V19457 Cee Bee A-410B, 71361 Cee Bee R682, V71361 Cee Bee 280, V71361 Cee Bee 280TC, V71361 DuBois C-1102, V72008 or V93883 Formula 28, V76071 Hydrex 09, V8V521 Intex 8201, V78304 Intex 8239, V78304 Metaclean AC, V98364 MIL-C-25769 <sup>*[1]</sup> MIL-C-87936, Type 1 (Opt to MIL-C-25769) <sup>*[1]</sup> Oakite 202, V44389 Oakite 204, V44389 Pacific B-82, V99365 Pennwalt 2271R, V99987 Tec Formula 1, V25227 Tec Formula 86-2, V25227 Turco Jet Clean C, V61102 Turco Jet Clean E, V61102 Turco 6783-10, V61102
Braze Flux Removers		Oakite 84A, V44389 Turco Composition 331, V61102
Carbon Remover, Engine Exhaust		Navee 427, V56883
Carbon Remover, Manual Heavy Duty		Cee Bee Alko, V71361
Cleaners		Alcor 910XX Paste, Alcor Chemical Co. Amchem 2, V84063 F.D. Snell's Cleaner 901, V99171 Freon TA, V18873 Freon TF, V18873 Freon 113, V18873 GMC 8000, V09402
Cleaners for Acrylic Transparencies and Windows		Cleaner No. 260, V18598 Permatex 403D, V08028 Static Stop, V28014
Corrosion Removers, Phosphoric Acid Type for Aluminum		Kelite Process K, V89138 or V99442 Oakite 36, V44389

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NOMENCLATURE	SPECIFICATION	RECOMMENDED MATERIALS/VENDORS
Corrosion Removers, Phosphoric Acid Type for Steels Heat-Treated at 220 ksi or Below		Kelite Polycote, V89138 or V99442 Oakite 31, V44389 Turco "W.O No. 1," V61102
Detergent, General Purpose	A-A-39 P-D-223 (Replaced by A-A-39)	*[1] *[1]
Detergents for Cleaning Interior Plastics and Painted Surfaces except Windows	D6-7127	Calla 301A, Lemon or Standard, V19457 Clean Quick, V74188 Glo Do-All Formula, V34364 Orvus WA Paste, V74188 Spraywhite E, V89138 or V99442 (New Supply Not Available) Winsol APC-120WX or APX-120WX, V62976 Winsol SE-700, V62976

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NOMENCLATURE	SPECIFICATION	RECOMMENDED MATERIALS/VENDORS
Emulsion Cleaners	BAC5763	Aerowash, V71410 Air Show, V94058 Air Show W, V94058
	BAC5763	Formula 28, V76071 Formula 29, V76071
	BAC5763	Biogenic SE 373, V13091
	BAC5763	Brulin 815GD, V94058 Can Du, V0192B
	BAC5763	Cee Bee A-7X7, V71361
	BAC5763	Cee Bee A-7X7 LF, V71361
	BAC5763	Cee Bee Emulso-Clean 22A, V71361
	BAC5763	Daraclean 282, V94058 Diversey DC-16, V71410 Diversey PX1244B, V71410 Diversey WS-1, V71410 Dubois T-743 USAF, V72008 or V93883 Formula 125, V94058 Formula 815MX, V94058
	BAC5744	Navee 427, V56883 Oakite 74L, V44389 Pacific B-81, V93965 Pennwalt 43A, V99987 Pennwalt 2271, V99987 Safety Solvent 52M, V94058 Super Can Du, V0192B 621, V0192B Turco 2844, V61102
	BAC5763	Turco 3878, V61102
	BAC5763	Turco 3878 LF-NC, V61102
	BAC5763	Turco 3878 LTNF, V61102 Turco 3942, V61102 Turco 3942-28B, V61102 Jet Clean B, V61102
	BAC5763	Jet Clean C, V61102 Wyandotte 20, V83339 Wyandotte 468, V83339 Wyandotte I-2364, V83339

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NOMENCLATURE	SPECIFICATION	RECOMMENDED MATERIALS/VENDORS
Etch Cleaners for Aluminum		Aluminetch No. 3, V61102 Diversey 202, V71410 Oakite 160, V44389 Penn Etch No. 5, V99987 Turco 4596, V61102
Foam Cleaners	BAC5744	Oakite 204, V44389 Oakite 74L, V44389
Organic Paint Strippers, Brush-On		Nuvite 631-3A, V0192B Pennwalt E-Z Strip 19AC, Type 1, V99987 Pennwalt E-Z Strip 19A, Type 1, V99987 Turco 4669 thick, V61102 (New supply not available) Turco 5292B, V61102 Turco 5351, V61102
Organic Paint Strippers, Immersion Type		Formula 1006, V89138 GMC 1006, V09402 Pennwalt 2496A, V99987 Pennwalt 2496B, V99987 Pennwalt Super CR, V99987 Turco Supercarb, V61102 Turco 5351 thin, V61102 Wyandotte P-1075, V83339
Solvents		
Acetone, Technical	ASTM D 329 EGPE 3-6 Product 1.01 GB 686-78 JIS-K-1503, Grade 1 O-A-51	*[1] *[1] *[1] *[1] *[1]
Aliphatic Naphtha	EGPE 3-6 Product 1.07 TT-N-95	*[1] *[1]
Ammonium Neutralizer	Commercial Grade	
Butyl Alcohol, Normal	ASTM D304 HG2-1138-77 ASTM D1007 JIS-K-1504 TT-B-846	*[1] *[1] *[1] *[1] *[1]
Sec-Butyl Alcohol	ASTM D1007	*[1]

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NOMENCLATURE	SPECIFICATION	RECOMMENDED MATERIALS/VENDORS
	TT-B-848	*[1]
Butyl Carbitol (diethylene glycol monobutyl ether)		V80524
Butyl Cellusolve (ethylene glycol monethyl)	TT-E-776	*[1]
Cleaning Solvent	BAC5750	Citra Safe, V0K209 Extra Solv. V0TZ07 Wedco 3500, V0VMT4
Cleaning Solvent, General Purpose	BMS 3-2, Type 1 (Superseded by aliphatic naphtha TT-N-95, Type 1) BMS 3-2, Type 2 (Superseded by aliphatic naphtha TT-N-95, Type 2)	Obsolete Obsolete
Cleaning Solvent, Two-Stage	BMS 11-5	Obsolete
Cleaning Solvent, Presealing	BMS 11-7, Types 1 and 2	*[1]
Denatured Alcohol	O-E-760	*[1]
Dry Cleaning Solvent	MIL-PRF-680 P-D-680 (Superseded by MIL-PRF- 680)	*[1] *[1]
Ethyl Acetate, technical	TT-E-751	*[1]
Ethyl Alcohol, denatured	AMS 3002 ASTM E 1145 Type 2 GB 394-64 GB 6820-86	*[1] *[1] *[1] *[1]
Ethyl Cellosolve (ethylene glycol monethyl)	TT-E-781	*[1]
Fingerprint Remover Compound, Corrosion Preventive	MIL-C-15074	*[1]
Heptane	Commercial Grade	
Isopropyl Acetate	TT-I-721	*[1]
Isopropyl Alcohol	HG2-1285-80 JIS-K-1522 MIL-F-5566 (Obsolete) TT-I-735 (Replaces MIL-F-5566)	*[1] *[1] *[1] *[1]
Kerosene	VV-K-221	*[1]
Methanol (Methyl alcohol)	O-M-232	*[1]

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NOMENCLATURE	SPECIFICATION	RECOMMENDED MATERIALS/VENDORS
Methyl Cellusolve (Ethylene glycol monomethyl ether)	O-E-780	*[1]
Methyl Cellusolve (Methyl glycol monomethyl ether)	TT-E-781	*[1]
Methylene Chloride (dichloromethane)	ASTM D4701 MIL-D-6998 (Obsolete. Use ASTM D4701)	*[1]
Methyl Ethyl Ketone (MEK)	ASTM D740 BS 1940 EGPE 3-6 Product 1.10 HGB3503-62 JIS-K-1524 TT-M-261 (Obsolete. Use ASTM D740)	*[1] *[1] *[1] *[1] *[1] *[1]
Methyl Isobutyl Ketone (MIBK)	ASTM D1153 JIS-K-8903, Common Grade Q/HG12-293-63 TT-M-268 (Obsolete. Use ASTM D1153)	*[1] *[1] *[1]
Methyl Propyl Ketone (MPK)	BMS 11-9, Grades 1 and 2	*[1]
Mineral Spirits	TT-T-291	*[1]
2-Nitropropane	Commercial Grade	
Perchloroethylene (dichloroethylene)	O-P-191	*[1]
Tetrachloroethylene (Perchloroethylene) technical	ASTM 4376 O-T-236 (Obsolete. Use ASTM 4376)	*[1]
Thinner		TL-52, V98502
Thinner, Dope and Lacquer	ASTM 4081, 4376 TT-T-266 (Obsolete. Use ASTM 4081, 4376)	*[1]
Toluene	ASTM D362 ASTM D2695 GB 684-65 JAN-T-171, Grade A TT-T-548	*[1] *[1] *[1] *[1] *[1]
Trichloroethane, technical, inhibited (methyl chloroform)	ASTM D4126	*[1]

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NOMENCLATURE	SPECIFICATION	RECOMMENDED MATERIALS/VENDORS
	MIL-T-81533 O-T-620 (Obsolete. Use ASTM D4126)	*[1]
Trichloroethylene	JIS-K-1508 MIL-T-7003 Q/HG12-520-64	*[1] *[1] *[1]
Trichloroethylene, stabilized	ASTM D4080 O-T-630 (Obsolete. Use ASTM D4080)	*[1]
Trichloroethylene	BMS 11-6, Type 1	Perm-A-Chlor NA, V17125 Perm-A-Chlor NA-LR, V17125 Triclene D, V18873 Triclene MD, V18873 Neu Tri, V96717 Blacosolv, V7L611 Hooker MD, V09287 Hooker MD (27602), V09287 Trichlor, V0198B Trichloroethylene, V95643 MD Grade Special (Metal Degreasing Neutral No. 7 Grade), VK0008 or V1FK89 X115 Dual Purpose Trichloroethylene, V0348B
Trichloroethylene	BMS 11-6, Type 2	Neu Tri, V96717 Perm-A-Chlor NA-LR, V17125 Hooker MD (27602), V09287 Triclene MD, V18873 X115 Dual Purpose, V0348B Trichloroethylene, V95643
Trichlorotrifluoroethane	MIL-C-81302, Type 1	*[1]
Xylene	ASTM D 846 HGB 3129-9 TT-X-916	*[1] *[1] *[1]

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NOMENCLATURE	SPECIFICATION	RECOMMENDED MATERIALS/VENDORS
Steam Cleaning Materials	P-S-751 (Superseded by P-C-437) P-C-437	B and B 311A, V21361 Oakite 94, V44389 Oakite 204, V44389 Pennwalt 799, V99987 Pennwalt 2079C, V99987 Steamzall, V61102 Synco Spray It, V19410 Texo Liquid Steam Cleaning Compound, V22169 Turco Air-Tech 22, V61102 Turco Air-Tech 23, V61102 Turco Liquid Steam, V61102 *[1] *[1]
Vegetable Shell for deglossing		Shelblast AD-7B, 35-60 Mesh, V90888

\*[1] Refer to the applicable Qualified Products List of the listed specification for approved material part numbers and vendors.

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