



SOPM

STANDARD OVERHAUL PRACTICES MANUAL

This document has EAR data with Export Control Classification Numbers (ECCN) of:
9E991

Export of this technology is controlled under the United States Export Administration Regulations (EAR) (15 CFR 730-774). An export license may be required before it is used for development, production or use by foreign persons from specific countries. The controller of this data has the individual responsibility to abide by all export laws.

BOEING PROPRIETARY, CONFIDENTIAL, AND/OR TRADE SECRET

Copyright © 1995 The Boeing Company
Unpublished Work - All Rights Reserved

Boeing claims copyright in each page of this document only to the extent that the page contains copyrightable subject matter. Boeing also claims copyright in this document as a compilation and/or collective work.

This document includes proprietary information owned by The Boeing Company and/or one or more third parties. Treatment of the document and the information it contains is governed by contract with Boeing. For more information, contact The Boeing Company, P.O. Box 3707, Seattle, Washington 98124.

Boeing, the Boeing signature, the Boeing symbol, 707, 717, 727, 737, 747, 757, 767, 777, 787, Dreamliner, BBJ, DC-8, DC-9, DC-10, KC-10, KDC-10, MD-10, MD-11, MD-80, MD-88, MD-90, P-8A, Poseidon and the Boeing livery are all trademarks owned by The Boeing Company; and no trademark license is granted in connection with this document unless provided in writing by Boeing.

DOCUMENT D6-51702

PUBLISHED BY BOEING COMMERCIAL AIRPLANES GROUP, SEATTLE, WASHINGTON, USA
A DIVISION OF THE BOEING COMPANY
PAGE DATE: Jul 01/2009



STANDARD OVERHAUL PRACTICES MANUAL

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.

Revision		Filed	
Number	Date	Date	Initials

Revision		Filed	
Number	Date	Date	Initials



STANDARD OVERHAUL PRACTICES MANUAL

Revision No. 109
Jul 01/2009

To: All holders of this Boeing Document D6-51702

Attached is the current revision to the Component Maintenance Manual.

The STANDARD OVERHAUL PRACTICES MANUAL (CMM) 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.

ATTENTION

IF YOU RECEIVE PRINTED REVISIONS, PLEASE VERIFY THAT YOU HAVE RECEIVED AND FILED THE PREVIOUS REVISION. BOEING MUST BE NOTIFIED WITHIN 30 DAYS IF YOU HAVE NOT RECEIVED THE PREVIOUS REVISION. REQUESTS FOR REVISIONS OTHER THAN THE PREVIOUS REVISION WILL REQUIRE A COMPLETE MANUAL REPRINT SUBJECT TO REPRINT CHARGES SHOWN IN THE DATA AND SERVICES CATALOG.

TRANSMITTAL LETTER
Page 1
Jul 01/2009

D6-51702



STANDARD OVERHAUL PRACTICES MANUAL

Subject/Page	Date	Subject/Page	Date	Subject/Page	Date
TITLE PAGE					
O 1	Jul 01/2009				
2	BLANK				
REVISION RECORD					
1	Jul 01/2005				
2	Jul 01/2005				
TRANSMITTAL LETTER					
O 1	Jul 01/2009				
2	BLANK				
EFFECTIVE PAGES					
1	Jul 01/2009				
2	BLANK				
EFFECTIVE CHAPTERS					
O 1	Jul 01/2009				
2	BLANK				
ADDED/DELETED SUBJECTS					
O 1	Jul 01/2009				
2	BLANK				
INTRODUCTION					
1	Jul 01/2005				
2	Jul 01/2005				
NUMERICAL INDEX/ALPHA					
R 1	Jul 01/2009				
R 2	Jul 01/2009				
R 3	Jul 01/2009				
R 4	Jul 01/2009				
NUMERICAL INDEX/MANUAL					
R 1	Jul 01/2009				
R 2	Jul 01/2009				
R 3	Jul 01/2009				
R 4	Jul 01/2009				
R 5	Jul 01/2009				
R 6	Jul 01/2009				

A = Added, R = Revised, D = Deleted, O = Overflow

EFFECTIVE PAGES

Page 1

Jul 01/2009

D6-51702



STANDARD OVERHAUL PRACTICES MANUAL

	Chapter	Date	Title
R	20	Jul 01/2009	STANDARD OVERHAUL PRACTICES

A = Added, R = Revised

EFFECTIVE CHAPTERS

Page 1

Jul 01/2009

D6-51702

BOEING PROPRIETARY - Copyright © Unpublished Work - See title page for details



STANDARD OVERHAUL PRACTICES MANUAL

Added Subjects

<u>Manual Number</u>	<u>Title</u>
----------------------	--------------

NONE

Deleted Subjects

<u>Manual Number</u>	<u>Title</u>
----------------------	--------------

NONE



STANDARD OVERHAUL PRACTICES MANUAL

INTRODUCTION

1. GENERAL

- A. The Standard Overhaul Practices Manual (SOPM), Document D6-51702, includes a Title Page, a Revision Record, a Transmittal Letter, a List of Effective Pages, alphanumeric indexes, and the individual standard overhaul practices manuals. These manuals are prepared by Boeing's Commercial Airplanes Services (CAS) group.
- B. Each individual manual contains technical data for standard practices used during overhaul of Boeing-proprietary components. The technical data is used along with the data in the component-specific Boeing Commercial Jet Overhaul Manuals and Component Maintenance Manuals.
- C. The technical data is collected from Boeing Process Specifications and Documents. Details are added or changed with service experience.

2. MANUAL IDENTIFICATION

- A. We put the manuals into different groups because of the different types of data. Each manual has a special manual number.
- B. Each manual number has six digits, in three two digit parts. The first part is 20 as required by Air Transport Association Specification 100 for standard practices. The second part is the section number, and puts the manual into groups. Each group is about a different type of data. The last part identifies one manual; that is, all pages about a specified subject.

3. LIST OF EFFECTIVE PAGES

- A. Each individual manual has a list of effective pages (LEP). The LEP is a list of all pages in that manual with the date of the latest revision to each page. This list will show if your copy of the manual contains the latest pages.
- B. The Introduction has a Table of Contents which gives the date of the latest revision for each individual manual, which will show if your copy of the LEP for a manual is up-to-date.
- C. The Introduction LEP shows the latest date of the Table of Contents pages, which will show if your copy of the Table of Contents is up-to-date.

4. REVISION SERVICE

- A. The SOPM will be kept current by revision service. A list of effective pages comes with each revision of each individual SOPM subject. Two different types of revision service are used, normal and temporary.
 - (1) Normal Revision Service
 - (a) Users who have a contract for continuous revision service will get revisions three times a year, dated March 1, July 1 and November 1.
 - (b) On the List of Effective Pages (LEP), revised pages have letter codes A (added), R (revised), D (deleted) or O (overflow, when data was moved to or from a page by added or deleted material before or after it in the document). Pages without a code were not changed in this revision.
 - (c) On each individual page, the revised area has a revision bar in the left margin.
 - (d) Each page has a date in the lower right corner that shows when this page was last changed. The LEP shows this date for each page in the list. This is the authority that shows the current pages in the document.



STANDARD OVERHAUL PRACTICES MANUAL

- (2) Temporary Revision Service
 - (a) Temporary Revisions (TRs) supply data to the users until the data can be added to the manual in the normal revision.
 - (b) TRs are printed on yellow paper and are numbered in sequence (20-1, 20-2, etc.).
 - (c) Data in the TR is usually included in the next available normal revision of the SOPM. When the TR data is included, the TR number is added to the TR/SB page. The Highlights page will also tell users that the TR data is now included.
 - (d) Because sometimes the TR cannot be included in the next normal revision, be sure that the TR data is included in the manual before you discard your copy of the TR.
5. QUESTIONS?
 - A. If you have questions about the SOPM, send Boeing a message through your usual communications channels, such as through MyBoeingFleet or through the Boeing Communications System.
 - B. (Reserved)
6. USE OF STANDARD INDUSTRY PRACTICES
 - A. If there are no specific instructions in the component-specific overhaul instructions, you can use standard industry practices. See SOPM 20-00-00 for the definition of standard industry practices
 - B. If you find that standard industry practices are not sufficient, you can send a request for detailed instructions to our Service Engineering group



STANDARD OVERHAUL PRACTICES MANUAL

NUMERICAL INDEX/ALPHA

<u>TITLE</u>	<u>MANUAL NUMBER</u>	<u>REV</u>	<u>MANUAL REVISION DATE</u>
ANODIZING OF MAGNESIUM ALLOYS	20-43-02	11	Jul 01/2009
APPLICATION AND FINISHING OF THERMAL SPRAY COATINGS	20-10-05	26	Jul 01/2009
APPLICATION OF ADHESIVES	20-50-12	47	Jul 01/2009
APPLICATION OF AERODYNAMIC SMOOTHING SEALANT	20-50-11	12	Jul 01/2009
APPLICATION OF ALUMINUM FOIL AND OTHER MARKERS	20-50-05	16	Jul 01/2009
APPLICATION OF BONDED SOLID FILM LUBRICANTS	20-50-08	28	Jul 01/2009
APPLICATION OF CHEMICAL AND SOLVENT RESISTANT FINISHES	20-41-02	13	Jul 01/2009
APPLICATION OF CORROSION INHIBITING ADHESIVE PRIMER	20-50-14	9	Jul 01/2009
APPLICATION OF CORROSION INHIBITING COMPOUNDS	20-41-05	22	Jul 01/2009
APPLICATION OF CORROSION PREVENTIVES TO INTERIOR OF CLOSED END TUBES	20-41-03	10	Jul 01/2009
APPLICATION OF INTERIOR DECORATIVE FINISHES	20-41-04	9	Jul 01/2009
APPLICATION OF POLYURETHANE RAIN EROSION RESISTANT COATING	20-44-03	11	Jul 01/2009
APPLICATION OF SPECIAL PURPOSE COATINGS AND FINISHES	20-44-01	27	Jul 01/2009
APPLICATION OF STENCILS, INSIGNIA, SILK SCREEN, PART NUMBERING AND IDENTIFICATION MARKINGS	20-50-10	20	Jul 01/2009
APPLICATION OF URETHANE COMPATIBLE PRIMER	20-44-04	7	Jul 01/2009
APPLICATION OF WEATHER, FUEL, OIL, SOLVENT, AND HEAT RESISTANT PROTECTIVE COATINGS	20-50-13	14	Jul 01/2009
ASSEMBLY OF SWAGED CABLES	20-50-16	9	Jul 01/2009
BEARING AND BUSHING REPLACEMENT	20-50-03	88	Jul 01/2009
BOLT AND NUT INSTALLATION	20-50-01	29	Jul 01/2009
BONDING AID FOR SHIMS, FILLERS AND DETAILS	20-50-24	6	Jul 01/2009
BRIGHT CADMIUM PLATING	20-42-05	21	Jul 01/2009
CHEMICAL CONVERSION COATINGS FOR ALUMINUM	20-43-03	16	Jul 01/2009
CHROMIC ACID ANODIZING	20-43-01	14	Jul 01/2009
CLEANING AND RELUBRICATING BEARINGS	20-30-01	14	Jul 01/2009
CLEANING MATERIALS	20-60-01	52	Jul 01/2009
COPPER PLATING	20-42-07	10	Jul 01/2009
CORROSION PROTECTION PROCEDURES FOR HYDRAULIC COMPONENTS	20-50-17	5	Jul 01/2009
DECODING TABLE FOR BOEING FINISH CODES	20-41-01	94	Jul 01/2009
ELECTRICAL AND ELECTRONIC COMPONENT STANDARD MAINTENANCE INSTRUCTIONS	20-11-04	10	Jul 01/2009



STANDARD OVERHAUL PRACTICES MANUAL

TITLE	MANUAL NUMBER	REV	MANUAL REVISION DATE
ELECTRICAL AND ELECTRONIC COMPONENT STANDARD TESTING INSTRUCTIONS	20-11-09	6	Jul 01/2009
ELECTRODEPOSITED NICKEL PLATING	20-42-09	25	Jul 01/2009
ELECTROLESS NICKEL PLATING	20-42-08	16	Jul 01/2009
FASTENER INSTALLATION IN COMPOSITE STRUCTURES	20-50-18	10	Jul 01/2009
FINISHING MATERIALS	20-60-02	58	Jul 01/2009
FLUID SYSTEM FITTING TORQUE VALUES	20-50-00	6	Jul 01/2009
GENERAL CLEANING PROCEDURES	20-30-03	42	Jul 01/2009
GENERAL SEALING	20-50-19	14	Jul 01/2009
GRINDING OF CHROME PLATED PARTS	20-10-04	17	Jul 01/2009
HANDLING OF ELECTROSTATIC DISCHARGE SENSITIVE DEVICES	20-12-02	9	Jul 01/2009
HARD CHROME PLATING	20-42-03	30	Jul 01/2009
HOW TO APPLY TAMPER-PROOF PUTTY	20-50-26	1	Jul 01/2009
HOW TO INSTALL BOLT RETAINING HARDWARE ON CLAMPS	20-50-25	1	Jul 01/2009
HOW TO INSTALL NAMEPLATE STRAPS AND SEALS	20-50-21	5	Jul 01/2009
HOW TO INSTALL THREADED INSERTS	20-50-22	5	Jul 01/2009
HOW TO MAKE AND INSTALL MOLDABLE PLASTIC SHIMS	20-50-23	8	Jul 01/2009
HOW TO MAKE AND INSTALL RESIN BOND LAMINATED SHIMS AND SOLID FILLERS	20-50-20	5	Jul 01/2009
HOW TO PROGRAM PROGRAMMABLE CIRCUIT DEVICES	20-11-08	6	Jul 01/2009
INSTALLATION OF CASTABLE NON-METAL SHIMS	20-50-15	8	Jul 01/2009
INSTALLATION OF O-RINGS AND TEFLON SEALS	20-50-06	16	Jul 01/2009
INSTALLATION OF PERMANENT PINS AND PLUGS IN DRILL PASSAGES	20-50-04	11	Jul 01/2009
INSTALLATION OF PROTECTIVE GROMMET	20-50-09	15	Jul 01/2009
INSTALLATION OF SAFETYING DEVICES	20-50-02	12	Jul 01/2009
INSTRUMENT PANEL ELECTRICAL MODULE GENERAL INFORMATION	20-11-05	26	Jul 01/2009
INTRODUCTION	20-00-00	33	Jul 01/2009
LOW HYDROGEN EMBRITTLEMENT CADMIUM - TITANIUM ALLOY PLATING	20-42-02	18	Jul 01/2009
LOW HYDROGEN EMBRITTLEMENT CADMIUM PLATING	20-42-01	23	Jul 01/2009
LOW HYDROGEN EMBRITTLEMENT STYLUS CADMIUM PLATING	20-42-10	17	Jul 01/2009
LUBRICANTS	20-60-03	69	Jul 01/2009
LUBRICATION	20-50-07	13	Jul 01/2009
MACHINING OF ALLOY STEEL	20-10-02	41	Jul 01/2009

NUMERICAL INDEX/ALPHA

Page 2

Jul 01/2009

D6-51702



STANDARD OVERHAUL PRACTICES MANUAL

TITLE	MANUAL NUMBER	REV	MANUAL REVISION DATE
! MACHINING OF COPPER BERYLLIUM ALLOYS	20-10-09	8	Jul 01/2009
! MACHINING OF TITANIUM	20-10-07	13	Jul 01/2009
! MAGNETIC PARTICLE INSPECTION	20-20-01	28	Jul 01/2009
! MISCELLANEOUS MATERIALS	20-60-04	97	Jul 01/2009
! PENETRANT METHODS OF INSPECTION	20-20-02	24	Jul 01/2009
! PREPARATION OF ALUMINUM ALLOYS FOR ELECTROPLATING	20-42-04	12	Jul 01/2009
! PROTECTION, STORAGE AND HANDLING OF AIRPLANE COMPONENTS	20-70-01	19	Jul 01/2009
! REMOVAL AND REPLACEMENT OF SURFACE MOUNTED DEVICES	20-11-07	13	Jul 01/2009
! REMOVAL OF FAYING SURFACE SEALED METAL FITTINGS FROM COMPOSITE STRUCTURES	20-10-08	7	Jul 01/2009
! REPAIR AND REFINISH OF HIGH STRENGTH STEEL PARTS	20-10-01	22	Jul 01/2009
! REPAIR OF CONDUCTIVE COATINGS	20-10-06	13	Jul 01/2009
! REPAIR OF ELECTRICAL CONNECTORS	20-11-02	22	Jul 01/2009
! REPAIR OF ELECTRICAL TERMINATIONS AND ELECTRICAL BONDING AREAS	20-11-03	18	Jul 01/2009
! REPAIR OF PRINTED CIRCUIT ASSEMBLIES AND COMPONENT BOARD ASSEMBLIES	20-11-01	39	Jul 01/2009
! REPAIR OF WRAPPED WIRE ELECTRICAL CONNECTIONS	20-11-06	9	Jul 01/2009
! REPLACEMENT OF BALL GRID ARRAY (BGA) PARTS	20-11-10	8	Jul 01/2009
! SHOT PEENING	20-10-03	36	Jul 01/2009
! SILVER PLATING	20-42-06	9	Jul 01/2009
! SOLDERING ELECTRICAL CONNECTIONS	20-12-01	12	Jul 01/2009
! SOLVENTS FOR CLEANING OF POLYMERICS, PHENOLICS AND NYLON (SERIES 98 AND 98-1)	20-30-98	6	Jul 01/2009
! SOLVENTS FOR FINAL CLEANING BEFORE AERODYNAMIC SMOOTHING AND FAIRING (SERIES 95)	20-30-95	8	Jul 01/2009
! SOLVENTS FOR FINAL CLEANING BEFORE APPLICATION OF RAIN EROSION RESISTANT COATINGS (SERIES 94)	20-30-94	7	Jul 01/2009
! SOLVENTS FOR FINAL CLEANING BEFORE FUEL TANK SEALING (SERIES 93)	20-30-93	9	Jul 01/2009
! SOLVENTS FOR FINAL CLEANING BEFORE GENERAL SEALING (SERIES 92)	20-30-92	8	Jul 01/2009
! SOLVENTS FOR FINAL CLEANING BEFORE STRUCTURAL BONDING (SERIES 97)	20-30-97	7	Jul 01/2009
! SOLVENTS FOR FINAL CLEANING OF ALL ORGANIC COATINGS BEFORE NON -STRUCTURAL BONDING (SERIES 89)	20-30-89	7	Jul 01/2009

NUMERICAL INDEX/ALPHA

Page 3

Jul 01/2009

D6-51702



STANDARD OVERHAUL PRACTICES MANUAL

TITLE	MANUAL NUMBER	REV	MANUAL REVISION DATE
I SOLVENTS FOR FINAL CLEANING OF ALL ORGANIC COATINGS BEFORE PAINTING (SERIES 85)	20-30-85	7	Jul 01/2009
I SOLVENTS FOR FINAL CLEANING OF COMPOSITES BEFORE NON-STRUCTURAL BONDING (SERIES 91)	20-30-91	7	Jul 01/2009
I SOLVENTS FOR FINAL CLEANING OF COMPOSITES BEFORE PAINTING (SERIES 87)	20-30-87	8	Jul 01/2009
I SOLVENTS FOR FINAL CLEANING OF COMPOSITES BEFORE STRUCTURAL BONDING (SERIES 99)	20-30-99	7	Jul 01/2009
I SOLVENTS FOR FINAL CLEANING OF METAL BEFORE NON-STRUCTURAL BONDING (SERIES 88)	20-30-88	7	Jul 01/2009
I SOLVENTS FOR FINAL CLEANING OF METAL BEFORE PAINTING (SERIES 84)	20-30-84	7	Jul 01/2009
I SOLVENTS FOR FINAL CLEANING OF OXYGEN SYSTEM COMPONENTS (SERIES 96)	20-30-96	8	Jul 01/2009
I SOLVENTS FOR FINAL CLEANING OF SOLVENT RESISTANT ORGANIC COATINGS BEFORE NON-STRUCTURAL BONDING (SERIES 90)	20-30-90	7	Jul 01/2009
I SOLVENTS FOR FINAL CLEANING OF SOLVENT RESISTANT ORGANIC COATINGS BEFORE PAINTING (SERIES 86)	20-30-86	8	Jul 01/2009
I SOLVENTS FOR GENERAL CLEANING OF ALL ORGANIC COATINGS (SERIES 81)	20-30-81	7	Jul 01/2009
I SOLVENTS FOR GENERAL CLEANING OF COMPOSITES (SERIES 83)	20-30-83	8	Jul 01/2009
I SOLVENTS FOR GENERAL CLEANING OF METAL (SERIES 80)	20-30-80	7	Jul 01/2009
I SOLVENTS FOR GENERAL CLEANING OF SOLVENT RESISTANT ORGANIC COATINGS (SERIES 82)	20-30-82	7	Jul 01/2009
I STRIPPING OF PROTECTIVE FINISHES	20-30-02	30	Jul 01/2009
I TEMPORARY PROTECTIVE COATINGS	20-44-02	12	Jul 01/2009



STANDARD OVERHAUL PRACTICES MANUAL

NUMERICAL INDEX/MANUAL

MANUAL NUMBER	TITLE	PART NUMBER	REV	MANUAL REVISION DATE
I 20-00-00	INTRODUCTION		33	Jul 01/2009
I 20-10-01	REPAIR AND REFINISH OF HIGH STRENGTH STEEL PARTS		22	Jul 01/2009
I 20-10-02	MACHINING OF ALLOY STEEL		41	Jul 01/2009
I 20-10-03	SHOT PEENING		36	Jul 01/2009
I 20-10-04	GRINDING OF CHROME PLATED PARTS		17	Jul 01/2009
I 20-10-05	APPLICATION AND FINISHING OF THERMAL SPRAY COATINGS		26	Jul 01/2009
I 20-10-06	REPAIR OF CONDUCTIVE COATINGS		13	Jul 01/2009
I 20-10-07	MACHINING OF TITANIUM		13	Jul 01/2009
I 20-10-08	REMOVAL OF FAYING SURFACE SEALED METAL FITTINGS FROM COMPOSITE STRUCTURES		7	Jul 01/2009
I 20-10-09	MACHINING OF COPPER BERYLLIUM ALLOYS		8	Jul 01/2009
I 20-11-01	REPAIR OF PRINTED CIRCUIT ASSEMBLIES AND COMPONENT BOARD ASSEMBLIES		39	Jul 01/2009
I 20-11-02	REPAIR OF ELECTRICAL CONNECTORS		22	Jul 01/2009
I 20-11-03	REPAIR OF ELECTRICAL TERMINATIONS AND ELECTRICAL BONDING AREAS		18	Jul 01/2009
I 20-11-04	ELECTRICAL AND ELECTRONIC COMPONENT STANDARD MAINTENANCE INSTRUCTIONS		10	Jul 01/2009
I 20-11-05	INSTRUMENT PANEL ELECTRICAL MODULE GENERAL INFORMATION		26	Jul 01/2009
I 20-11-06	REPAIR OF WRAPPED WIRE ELECTRICAL CONNECTIONS		9	Jul 01/2009
I 20-11-07	REMOVAL AND REPLACEMENT OF SURFACE MOUNTED DEVICES		13	Jul 01/2009
I 20-11-08	HOW TO PROGRAM PROGRAMMABLE CIRCUIT DEVICES		6	Jul 01/2009
I 20-11-09	ELECTRICAL AND ELECTRONIC COMPONENT STANDARD TESTING INSTRUCTIONS		6	Jul 01/2009
I 20-11-10	REPLACEMENT OF BALL GRID ARRAY (BGA) PARTS		8	Jul 01/2009
I 20-12-01	SOLDERING ELECTRICAL CONNECTIONS		12	Jul 01/2009



STANDARD OVERHAUL PRACTICES MANUAL

MANUAL NUMBER	TITLE	PART NUMBER	REV	MANUAL REVISION DATE
I 20-12-02	HANDLING OF ELECTROSTATIC DISCHARGE SENSITIVE DEVICES		9	Jul 01/2009
I 20-20-01	MAGNETIC PARTICLE INSPECTION		28	Jul 01/2009
I 20-20-02	PENETRANT METHODS OF INSPECTION		24	Jul 01/2009
I 20-30-01	CLEANING AND RELUBRICATING BEARINGS		14	Jul 01/2009
I 20-30-02	STRIPPING OF PROTECTIVE FINISHES		30	Jul 01/2009
I 20-30-03	GENERAL CLEANING PROCEDURES		42	Jul 01/2009
I 20-30-80	SOLVENTS FOR GENERAL CLEANING OF METAL (SERIES 80)		7	Jul 01/2009
I 20-30-81	SOLVENTS FOR GENERAL CLEANING OF ALL ORGANIC COATINGS (SERIES 81)		7	Jul 01/2009
I 20-30-82	SOLVENTS FOR GENERAL CLEANING OF SOLVENT RESISTANT ORGANIC COATINGS (SERIES 82)		7	Jul 01/2009
I 20-30-83	SOLVENTS FOR GENERAL CLEANING OF COMPOSITES (SERIES 83)		8	Jul 01/2009
I 20-30-84	SOLVENTS FOR FINAL CLEANING OF METAL BEFORE PAINTING (SERIES 84)		7	Jul 01/2009
I 20-30-85	SOLVENTS FOR FINAL CLEANING OF ALL ORGANIC COATINGS BEFORE PAINTING (SERIES 85)		7	Jul 01/2009
I 20-30-86	SOLVENTS FOR FINAL CLEANING OF SOLVENT RESISTANT ORGANIC COATINGS BEFORE PAINTING (SERIES 86)		8	Jul 01/2009
I 20-30-87	SOLVENTS FOR FINAL CLEANING OF COMPOSITES BEFORE PAINTING (SERIES 87)		8	Jul 01/2009
I 20-30-88	SOLVENTS FOR FINAL CLEANING OF METAL BEFORE NON-STRUCTURAL BONDING (SERIES 88)		7	Jul 01/2009
I 20-30-89	SOLVENTS FOR FINAL CLEANING OF ALL ORGANIC COATINGS BEFORE NON-STRUCTURAL BONDING (SERIES 89)		7	Jul 01/2009
I 20-30-90	SOLVENTS FOR FINAL CLEANING OF SOLVENT RESISTANT ORGANIC COATINGS BEFORE NON-STRUCTURAL BONDING (SERIES 90)		7	Jul 01/2009



STANDARD OVERHAUL PRACTICES MANUAL

MANUAL NUMBER	TITLE	PART NUMBER	REV	MANUAL REVISION DATE
I 20-30-91	SOLVENTS FOR FINAL CLEANING OF COMPOSITES BEFORE NON-STRUCTURAL BONDING (SERIES 91)		7	Jul 01/2009
I 20-30-92	SOLVENTS FOR FINAL CLEANING BEFORE GENERAL SEALING (SERIES 92)		8	Jul 01/2009
I 20-30-93	SOLVENTS FOR FINAL CLEANING BEFORE FUEL TANK SEALING (SERIES 93)		9	Jul 01/2009
I 20-30-94	SOLVENTS FOR FINAL CLEANING BEFORE APPLICATION OF RAIN EROSION RESISTANT COATINGS (SERIES 94)		7	Jul 01/2009
I 20-30-95	SOLVENTS FOR FINAL CLEANING BEFORE AERODYNAMIC SMOOTHING AND FAIRING (SERIES 95)		8	Jul 01/2009
I 20-30-96	SOLVENTS FOR FINAL CLEANING OF OXYGEN SYSTEM COMPONENTS (SERIES 96)		8	Jul 01/2009
I 20-30-97	SOLVENTS FOR FINAL CLEANING BEFORE STRUCTURAL BONDING (SERIES 97)		7	Jul 01/2009
I 20-30-98	SOLVENTS FOR CLEANING OF POLYMERICS, PHENOLICS AND NYLON (SERIES 98 AND 98-1)		6	Jul 01/2009
I 20-30-99	SOLVENTS FOR FINAL CLEANING OF COMPOSITES BEFORE STRUCTURAL BONDING (SERIES 99)		7	Jul 01/2009
I 20-41-01	DECODING TABLE FOR BOEING FINISH CODES		94	Jul 01/2009
I 20-41-02	APPLICATION OF CHEMICAL AND SOLVENT RESISTANT FINISHES		13	Jul 01/2009
I 20-41-03	APPLICATION OF CORROSION PREVENTIVES TO INTERIOR OF CLOSED END TUBES		10	Jul 01/2009
I 20-41-04	APPLICATION OF INTERIOR DECORATIVE FINISHES		9	Jul 01/2009
I 20-41-05	APPLICATION OF CORROSION INHIBITING COMPOUNDS		22	Jul 01/2009
I 20-42-01	LOW HYDROGEN EMBRITTLEMENT CADMIUM PLATING		23	Jul 01/2009
I 20-42-02	LOW HYDROGEN EMBRITTLEMENT CADMIUM - TITANIUM ALLOY PLATING		18	Jul 01/2009
I 20-42-03	HARD CHROME PLATING		30	Jul 01/2009



STANDARD OVERHAUL PRACTICES MANUAL

MANUAL NUMBER	TITLE	PART NUMBER	REV	MANUAL REVISION DATE
I 20-42-04	PREPARATION OF ALUMINUM ALLOYS FOR ELECTROPLATING		12	Jul 01/2009
I 20-42-05	BRIGHT CADMIUM PLATING		21	Jul 01/2009
I 20-42-06	SILVER PLATING		9	Jul 01/2009
I 20-42-07	COPPER PLATING		10	Jul 01/2009
I 20-42-08	ELECTROLESS NICKEL PLATING		16	Jul 01/2009
I 20-42-09	ELECTRODEPOSITED NICKEL PLATING		25	Jul 01/2009
I 20-42-10	LOW HYDROGEN EMBRITTLEMENT STYLUS CADMIUM PLATING		17	Jul 01/2009
I 20-43-01	CHROMIC ACID ANODIZING		14	Jul 01/2009
I 20-43-02	ANODIZING OF MAGNESIUM ALLOYS		11	Jul 01/2009
I 20-43-03	CHEMICAL CONVERSION COATINGS FOR ALUMINUM		16	Jul 01/2009
I 20-44-01	APPLICATION OF SPECIAL PURPOSE COATINGS AND FINISHES		27	Jul 01/2009
I 20-44-02	TEMPORARY PROTECTIVE COATINGS		12	Jul 01/2009
I 20-44-03	APPLICATION OF POLYURETHANE RAIN EROSION RESISTANT COATING		11	Jul 01/2009
I 20-44-04	APPLICATION OF URETHANE COMPATIBLE PRIMER		7	Jul 01/2009
I 20-50-00	FLUID SYSTEM FITTING TORQUE VALUES		6	Jul 01/2009
I 20-50-01	BOLT AND NUT INSTALLATION		29	Jul 01/2009
I 20-50-02	INSTALLATION OF SAFETYING DEVICES		12	Jul 01/2009
I 20-50-03	BEARING AND BUSHING REPLACEMENT		88	Jul 01/2009
I 20-50-04	INSTALLATION OF PERMANENT PINS AND PLUGS IN DRILL PASSAGES		11	Jul 01/2009
I 20-50-05	APPLICATION OF ALUMINUM FOIL AND OTHER MARKERS		16	Jul 01/2009
I 20-50-06	INSTALLATION OF O-RINGS AND TEFLON SEALS		16	Jul 01/2009
I 20-50-07	LUBRICATION		13	Jul 01/2009
I 20-50-08	APPLICATION OF BONDED SOLID FILM LUBRICANTS		28	Jul 01/2009
I 20-50-09	INSTALLATION OF PROTECTIVE GROMMET		15	Jul 01/2009



STANDARD OVERHAUL PRACTICES MANUAL

MANUAL NUMBER	TITLE	PART NUMBER	REV	MANUAL REVISION DATE
I 20-50-10	APPLICATION OF STENCILS, INSIGNIA, SILK SCREEN, PART NUMBERING AND IDENTIFICATION MARKINGS		20	Jul 01/2009
I 20-50-11	APPLICATION OF AERODYNAMIC SMOOTHING SEALANT		12	Jul 01/2009
I 20-50-12	APPLICATION OF ADHESIVES		47	Jul 01/2009
I 20-50-13	APPLICATION OF WEATHER, FUEL, OIL, SOLVENT, AND HEAT RESISTANT PROTECTIVE COATINGS		14	Jul 01/2009
I 20-50-14	APPLICATION OF CORROSION INHIBITING ADHESIVE PRIMER		9	Jul 01/2009
I 20-50-15	INSTALLATION OF CASTABLE NON-METAL SHIMS		8	Jul 01/2009
I 20-50-16	ASSEMBLY OF SWAGED CABLES		9	Jul 01/2009
I 20-50-17	CORROSION PROTECTION PROCEDURES FOR HYDRAULIC COMPONENTS		5	Jul 01/2009
I 20-50-18	FASTENER INSTALLATION IN COMPOSITE STRUCTURES		10	Jul 01/2009
I 20-50-19	GENERAL SEALING		14	Jul 01/2009
I 20-50-20	HOW TO MAKE AND INSTALL RESIN BOND LAMINATED SHIMS AND SOLID FILLERS		5	Jul 01/2009
I 20-50-21	HOW TO INSTALL NAMEPLATE STRAPS AND SEALS		5	Jul 01/2009
I 20-50-22	HOW TO INSTALL THREADED INSERTS		5	Jul 01/2009
I 20-50-23	HOW TO MAKE AND INSTALL MOLDABLE PLASTIC SHIMS		8	Jul 01/2009
I 20-50-24	BONDING AID FOR SHIMS, FILLERS AND DETAILS		6	Jul 01/2009
I 20-50-25	HOW TO INSTALL BOLT RETAINING HARDWARE ON CLAMPS		1	Jul 01/2009
I 20-50-26	HOW TO APPLY TAMPER-PROOF PUTTY		1	Jul 01/2009
I 20-60-01	CLEANING MATERIALS		52	Jul 01/2009
I 20-60-02	FINISHING MATERIALS		58	Jul 01/2009
I 20-60-03	LUBRICANTS		69	Jul 01/2009
I 20-60-04	MISCELLANEOUS MATERIALS		97	Jul 01/2009



STANDARD OVERHAUL PRACTICES MANUAL

MANUAL NUMBER	TITLE	PART NUMBER	REV	MANUAL REVISION DATE
I 20-70-01	PROTECTION, STORAGE AND HANDLING OF AIRPLANE COMPONENTS		19	Jul 01/2009