

Aircraft Mechanic's Specifications Handbook



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Section One : Aircraft Hardware

ATA-CHAPTER/ SECTION NUMBERING

05 TIME LIMITS/MAINTENANCE CHECK

00 General

- 1 Time Limits
- 2 Operational Specifications
- 3 Mechanic Flight Approval

01 Line/Check

- 1 Post Flight
- 2 Through Flight
- 3 Line Check (Thru-Flight)
- 4 Line Check (Over-Night)

12

03 Engine/Systems Check

- 1 Engine Operation Check
- 2 Power Profile Check
- 3 Engine Powered Systems Check

04 Avionics/Electrical Check

- 1 Avionics/Electrical
- 2 Avionics
- 3 Electrical

05

06 Area/System Scheduled Checks

- hru (as for example 05-06-XX thru 05-83-XX
83 or 0506 thru 0583)

NOTE

(The second increment 06 thru 83 is as per the ATA chapter designation, the third increment, if used, is as per subchapter & sub-subchapter designations).

94

85

86

87

38

89

90

- 91 A Check Intermediate/Midperiod/
Service Operational Chk

92 B Check

93 C Check

94 D Check

95 E Check

96 Phase Overhaul

97

98

- 99 Unscheduled Maintenance Checks
(Should further coding be necessary,

utilize a third increment and the designations as defined in Chapter 5 of the applicable A/C Maintenance Manual).

06 DIMENSIONS & AREAS

00 General

10 Fuselage

- 1 Dimensions
- 2 Stations
- 3 Zones
- 4 Access Panels
- 5 Service Clearances

20 Wing - Stations & Access

- 1 Dimensions
- 2 Stations
- 3 Zones
- 4 Access Panels
- 5 Service Clearances

30 Nacelle/Pylon - Stations & Access

- 1 Dimensions
- 2 Stations
- 3 Zones
- 4 Access Panels
- 5 Service Clearances

40 Tail Assembly - Stations & Access

- 1 Dimensions
- 2 Stations
- 3 Zones
- 4 Access Panels
- 5 Service Clearances

07 LIFTING & SHORING

00 General

10 Jacking

- 1 Jacking for Maintenance
- 2 Auxiliary Support
- 3 Support with Engine Removed
- 4 Lifting Damaged A/C
- 5 Lifting Damaged A/C with Jacks
- 6 Lifting Damaged A/C with Pneumatic Bags
- 7 Lifting Damaged A/C with Nose Gear Collapsed

20 Shoring

08 LEVELING & WEIGHING

00 General

- 10 Leveling
- 20 Weighing Procedures

30 Weight & Balance Data

09 TOWING & TAXIING

00 General

10 Towing

20 Taxiing

30 Hand Signaling

10 PARKING & MOORING

00 General

01 Parking

1 Normal Parking

2 Prolonged Parking

3 Parking in High Winds

4 Parking with Engines Removed

20 Mooring

11 PLACARDS AND MARKINGS

00 General

10 Exterior Color Schemes & Markings

20 Exterior Placards & Markings

30 Interior Placards & Markings

NOTE: The NW Standard is to designate the ATA Chapter in which the placard falls for the subchapter number. E.G. A door placard would be numbered as 1152.

12 SERVICING

00 General

10 Refueling - Defueling

1 Refueling Procedure

2 Fuel Loading

3 Fire Hazards, Spills & Safety

4 Fuel Sump Draining

5 Ground Support Equipment

20 Oil Service

1 Engine Oil Servicing

2 Starter (Pneumatic)

3 Constant Speed Drive

4 Compressor (Air Conditioning)

5 APU

6 Nose Wheel Axle

30 Hydraulic Servicing

1 Aircraft Hydraulic Systems

2 Propeller System

3 Compressor (Air Conditioning)

40 Water Service

1 Potable Water

2 Nonpotable Water

3

4

5 Batteries

50 Waste Service

1 Lavatories

2 Galley Containers

3 Galley Units

60 Gaseous Service

1 Air

2 Nitrogen

3

4

5 Oxygen

70 Tire Service

1 Inflation

75 Fire Extinguishers

80 Rain Repellent

90 Lubrication

1 Lubricants

2 Methods of Application

3 Charts

14 EQUIPMENT OPERATION

00 General

10 Ground Operation Certification

1 Engine Operation/System Check

2 Support Equipment

20 Engine Operation/System Check (Runup)

1 Engine Operation

2 Systems Check

3 Aircraft Taxi

30 Discrepancy Analysis & Correction (Troubleshooting)

1 Engine (Including Power Profile)

2 Systems

3 Electrical

4 Electronics

15 TRAINING (REFERENCE MAINTENANCE PROGRAM MANUAL)

00 General

10 All Personnel

1 Company Familiarization

2 Safety

3 Fire Prevention & Control

4 First Aid & CPR

5 SCEPTRE

6 FIMS

7 Aircraft Familiarization

20 Maintenance Initial

1 A & P

2 R & E

30 Maintenance Differences

1 A & P

2 R & E

3 Self help

40 Ground Service/Facilities

50 Cleaner

60 Stores

70 Pilots

80 Flight Attendant

90 Station Personnel

16 GROUND SUPPORT EQUIPMENT

- 00 General
- 10 Fixed Refueling Equipment
 - 1 Familiarization
 - 2 Electrical
 - 3 Pump
 - 4 Motor
 - 5 Filtration
 - 6 Controls
- 20 Motorized Vehicles
 - 1 Tug
 - 2 Truck
 - 3 Tractor
 - 4 De-icer
 - 5 Air Conditioner
 - 6 Fork Lift
 - 7 Loader
 - 8 Fuel Truck
 - 9 Hi Lift
- 30 Towed Vehicles
 - 1 Bag Carts
 - 2 Ground Heaters
 - 3 De-icers
 - 4 Air Starts
 - 5 Hydraulic Mule
 - 6 Tail/Wing Docks
- 40 External Ground Power
 - 1 400 Cycle
 - 2 28 VDC
- 50
- 60
- 70
- 80
- 90 Miscellaneous Equipment

17 FACILITIES EQUIPMENT

- 00 General
- 10 Heating System
 - 1 Boilers
 - 2 Tanks
 - 3 Pumps
 - 4 Electrical
 - 5 Plumbing (Also see 17-90-2)
 - 6 Controls
 - 7 Chemicals
 - 8 Valves (Also see 17-90-1)
 - 9 Coils
- 20 Air Conditioner
 - 1 Chillers
 - 2 Motors
 - 3 Cooling Tower
 - 4 Pumps
 - 5 Plumbing (Also see 17-90-2)
 - 6 Valves (Also see 17-90-1)

- 7 Controls
- 8 Coils
- 30 Compressed Air
 - 1 Compressor
 - 2 Motor
 - 3 Dryer
 - 4 Controls
 - 5 Piping
 - 6 Valves (Also see 17-90-1)
 - 7 System
- 40 Air Handling
 - 1 Motors
 - 2 Fans
 - 3 Controls
 - 4 Ducting
 - 5 Coils
 - 6 System
- 50 Emergency Power
 - 1 Motor
 - 2 Generator
 - 3 Controls
 - 4 Electrical
 - 5 System
 - 6 Emergency Lighting
- 60 Fire Protection
 - 1 Tanks
 - 2 Pumps
 - 3 Hydrants
 - 4 Portable Equipment
 - 5 Valves (Also see 17-90-1)
 - 6 Controls
 - 7 Plumbing (Also see 17-90-2)
 - 8 System
 - 9 CO2 Extinguishers
- 70 Servicing
 - 1 Lighting
 - 2 Water
 - 3 Waste
 - 4 Plumbing (Also see 17-90-2)
 - 5 Electrical
 - 6 Doors
 - 7 Dock Levelers
 - 8 Irrigation
 - 9 Pneumatic Tube System
- 80 Lifting Equipment
 - 1 Hoists
 - 2 Jacks
 - 3 Slings
 - 4 Passenger Loading Bridges
- 90 Miscellaneous Equipment
 - 1 Valves
 - 2 Plumbing
 - 3 Chemicals

20 STANDARD PRACTICES - AIRFRAME

- 00 General
 - 1 Shop Practices
 - 2 Identification
 - 3 Investigation
- 10 Cleaning
 - 1 Chemical
 - 2 Abrasive
 - 3 Ultrasonic
 - 4 Mechanical
 - 5 Corrosion Removal
- 20 Inspection/Check
 - 1 Visual
 - 2 Detailed/Dimensional
 - 3 Penetrant
 - 4 Magnetic
 - 5 Eddy Current
 - 6 X-Ray/Holographic
 - 7 Ultrasonic
 - 8 Specific/Special
 - 9 Boroscope
- 30 Correction/Repair
 - 1 Welding/Brazing
 - 2 Machine/Reaming/Blending
 - 3 Stripping and Plating
 - 4 Fiberglass/Plastic/Honeycomb/Epoxy
 - 5 Plasma and Flame Spraying
 - 6 Bonding and Molding
 - 7 Heat Treating
 - 8 Surface Treating
 - 9 Machine Riveting & Flaring
- 40 Disassembly/Assembly
 - 1 Disassembly/Open
 - 2 Unit Removal
 - 3 Disconnect/Loosen
 - 4 Assembly/Close
 - 5 Unit Installation
 - 6 Reconnect/Tighten
 - 7 Unassigned
 - 8 Install Test Equipment
 - 9 Install Support Equipment
- 50 Materials/Hardware
 - 1 Fasteners
 - 2 Cables
 - 3 Pulleys
 - 4 Tubing
 - 5 Hoses
 - 6 O-Rings
 - 7 Decals/Placards
- 60 Servicing/Preserving
 - 1 Servicing
 - 2 Preserving
 - 3 Depreserving
 - 4 Lubricating
- 5 Fueling/Defueling
- 6 De-icing/Anti-icing
- 7 Disinfect/Sanitize
- 8 Storage
- 70 Testing
 - 1 Operational
 - 2 Functional
 - 3 System
 - 4 Bite
 - 5 Special
 - 6
 - 7
 - 8 Pressurize/Depressurize
 - 9 Leak Check
- 80 Processes
 - 1 Fault Isolation
 - 2 Adjusting/Aligning/Calibrating
 - 3 Rigging
 - 4 Balancing
- 90 Parts Manufacturing
- 21 AIR CONDITIONING**
- 00 General
- 10 Compression
 - 1 Eng.-Driven Air Comp. System
 - 2 Turbine Air Comp. System
 - 3
 - 4 Related Controls
 - 5 Related Indicating
 - 6 Ventilation
- 20 Distribution
 - 1 Ram Air System
 - 2 Hot Air System
 - 3 Bleed Air System
 - 4 Cold Air System
 - 5 Conditioning Air System
- 30 Pressurization Control
 - 1 Sensing
 - 2 Automatic Control
 - 3 Manual Control
 - 4 Emergency Control
 - 5 Indicating
 - 6 Pressure Relief
- 40 Heating
 - 1 Combustion Heater System
 - 2 Electric Heating
 - 3 Cargo Compartment Heating
- 50 Cooling
 - 1 Vapor Cycle
 - 2 Heat Exchanger
 - 3 Manual Control
 - 4 Automatic Control
 - 5 Indicating
 - 6 Water Separation
 - 7 Ram Air

- 8 Air Cycle Machine
- 9 Equipment Cooling
- 60 Temperature Control
 - 1 Sensing
 - 2 Automatic Control
 - 3 Manual Control
 - 4
 - 5 Indicating
- 70 Moisture/Air Contaminant Control
 - 1 Sensing
 - 2 Automatic Control
 - 3 Manual Control
 - 4 Water Separation
 - 5 Indicating
- 22 AUTO FLIGHT**
- 00 General
- 10 Autopilot
 - 1 Roll Control
 - 2 Pitch Control
 - 3 Yaw Control
 - 4 Engage Interlock
 - 5 Annunciation
 - 6 Controlling
 - 7 Actuation
 - 8 Indicating
 - 9 Warning
- 20 Speed-Attitude Correction (Mach Trim)
 - 1 Sensing
 - 2 Computing
 - 3 Actuation
 - 4 Indicating
 - 5 Warning
- 30 Auto Throttle
 - 1 Engaging
 - 2 Amplification
 - 3 Actuating
 - 4 Warning
- 40 System Monitor
 - 1 Indicating
- 50 Aerodynamic Load Alleviating
 - 1 Sensing
 - 2 Computing
 - 3 Indicating
 - 4 Warning
- 23 COMMUNICATIONS**
- 00 General
- 10 HF
 - 1 Transmit/Receive
 - 2 Control
 - 3 Antenna
- 20 VHF/UHF
 - 1 Satellite Communications
 - 2 Transmit/Receive
 - 3 Control
- 4 Antenna
- 5 Selcal
- 6 ACARS
- 30 Passenger Address & Entertainment
 - 1 Passenger Address
 - 2 Audio Entertainment
 - 3 Video Entertainment
 - 4 Portable Communications
 - 5 Public Correspondence (Airframe)
- 40 Interphone
 - 1 Flight
 - 2 Service
- 50 Audio Integrating
 - 1 Control
 - 2 Microphone
 - 3 Handsets
 - 4 Headsets
 - 5 Speakers
- 60 Static Discharging
- 70 Audio Monitoring (CVR)
- 80 Integrated Automatic Tuning
 - 1 Selector Panels
 - 2 Display Panels
 - 3 Control Computers
- 24 ELECTRIC POWER**
- 00 General
- 10 Generator Drive (CSD)
 - 1 Driving Mech and Disconnect
 - 2
 - 3 Control
 - 4 Oil System
 - 5 Indicating
- 20 AC Generation
 - 1 Generator/Alternator
 - 2 Inverter & Control
 - 3 Cont. Reg. & Prot.
 - 4 Cross-tie
 - 5 Indicating
 - 6 Emergency Power
- 30 DC Generation
 - 1 Generator
 - 2 APU Generator System
 - 3 Cont. Reg. & Prot.
 - 4 Conversion
 - 5 Indicating
 - 6 Battery
 - 7 Emergency Power
- 40 External Power
 - 1 Coupling
 - 2
 - 3 Control & Protection
 - 4 Indication & Warning
 - 5 AC Power
 - 6 DC Power

50 Electrical Load Distribution	2 Wheel Wells
1 AC Busses	3 Tail
2 AC Protection	4 Battery
3 DC Busses	5 Hydraulic
4 DC Protection	6 Air Conditioning
5 Miscellaneous Electrical Items	80 Insulation
6 Ground Service	1 Flight Compartment
7 Flight Power Supply	2 Passenger Compartment
25 EQUIPMENT & FURNISHINGS	3 Cargo/Accessory Compartments
00 General	26 FIRE PROTECTION
10 Flight Compartment	00 General
1 Seating	10 Detection
2 Wall & Ceiling Furnishings	1 Heat
3 Floor Furnishing	2 Smoke
4 Tables	20 Extinguishing
5 Electrical Equipment Rack	1 Storage
6 Coat Compartment	2 Distribution
7 Miscellaneous Furnishings	3 Control
20 Passenger Compartment	4 Indicating
1 Seats & Leg Rests	5 Portable
2 Wall & Ceiling Furnishings	30 Explosion Suppression
3 Floor Furnishings	1 Indicating
4 Movable Partitions, Curtains	2 Extinguishing
5 Hat Racks, Passenger Service Units and Berths	27 FLIGHT CONTROLS
6 Stowage Compartments	00 General
7 Misc. Furnishings/Publications	10 Aileron and Tab Control
30 Buffet and Galley	1 Aileron Manual Control
1 Buffet & Galley Structure	2 Aileron Power Control
2 Wall & Ceiling Furnishings	3 Aileron Tab Manual Control
3 Floor Furnishings	4 Aileron Tab Power Control
4 Ovens	5 Position Indicating
5 Mechanical Refrigerator	6 Aileron Dampers
6 Coffee Makers	20 Rudder and Tab Control/Ruddervator
7 Waste Container	1 Rudder Manual Control
8 Trolleys/Carriers	2 Rudder Power Control
40 Lavatories	3 Rudder Tab Manual Control
1 Lavatory Structure	4 Rudder Tab Power Control
2 Wall & Ceiling Furnishings	5 Position Indicating
3 Floor Furnishings	6 Rudder Dampers
4 Miscellaneous Furnishings	7 Rudder Limiters
50 Cargo Compartments/AG Spray Apparatus	30 Elevator and Tab Control/Elevon
1 Walls and Ceilings	1 Elevator Manual Control
2 Floors and Bracing	2 Elevator Power Control
3 Restraining	3 Elevator Tab Manual Control
4 Loading/Unloading Systems	4 Elevator Tab Power Control
60 Emergency	5 Position Indicating
1 Evacuation	6 Warning Systems
2 Flotation	7 Elevator Dampers
3 First Air Equipment	8 Elevator Limiters
4 Landing & Signal Flares	40 Horizontal Stabilizer Control/Stabilator
5 Emergency Megaphones	1 Manual Control
70 Accessory Compartments	2 Power Actuation
1 Avionics/Electrical	3 Alternate Trim Control
	4 Drive System