

# **CHAPTER 1 — GENERAL INFORMATION**

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#### GENERAL INFORMATION

#### 1-1. SCOPE OF THE MANUAL

# WARNING

ALL SPARE AND REPLACEMENT PARTS **PUBLISHED** DATA ΒY BELL HELICOPTER TEXTRON (BHT) ARE BASED ON THE SOLE USE OF BHT APPROVED PARTS. IF PARTS DEVELOPED OR APPROVED BY PARTIES OTHER THAN BHT ARE USED, THEN THE DATA PUBLISHED OR OTHERWISE SUPPLIED BY BHT ARE NOT APPLICABLE. THE USER IS WARNED NOT TO RELY ON BHT DATA FOR PARTS NOT APPROVED BY BHT. ALL APPLICABLE SPARE AND REPLACEMENT PARTS MUST BE OBTAINED FROM THE SUPPLIER OF THOSE PARTS. BHT IS RESPONSIBLE FOR PARTS OTHER THAN THOSE WHICH IT HAS ITSELF DEVELOPED OR APPROVED.

#### NOTE

An electronic copy of this manual is also available via the Electronic Commercial Technical Publications Web site at www.bellhelicopter.net.

#### NOTE

The terms and conditions of sale of Bell Helicopter Textron (BHT) support items are reflected in the introductory section of the current BHT spare parts price list.

This manual is the Illustrated Parts Breakdown (IPB) for the Model 212 helicopter. The manual identifies all detail parts, components, and assemblies that comprise, and are required for, the support of the helicopter.

# 1-2. ILLUSTRATED PARTS BREAKDOWN AND ASSOCIATED DOCUMENTS



DO NOT USE THE ILLUSTRATED PARTS BREAKDOWN AS A CONFIGURATION CONTROL DOCUMENT OR AS A MAINTENANCE MANUAL. ITS SOLE PURPOSE IS FOR THE IDENTIFICATION AND ORDERING OF SPARES.

#### NOTE

For identification of the special tools used for maintenance, repair, or restoration of the parts and components helicopters refer to the BHT-SPECTOOL-IPB.

The Illustrated Parts Breakdown (IPB) is not intended to provide information regarding maintenance, repair, or restoration of parts other than identification, issuance, or requisition of these parts. Therefore, the IPB should always be used as a supplement to the following Model 212 helicopter publications:

- Maintenance Manual (BHT-212-MM)
- Component Repair and Overhaul Manual (BHT-212-CR&O)

Links to these publications are available via the Electronic Commercial Technical Publications Web site at <a href="https://www.bellhelicopter.net">www.bellhelicopter.net</a>.

# 1-3. ILLUSTRATED PARTS BREAKDOWN AND ASSOCIATED DOCUMENTS — SUPPLEMENTAL DOCUMENTS

Technical Bulletins (TB) and Alert Service Bulletins (ASB) are published when necessary. These documents supplement the Illustrated Parts Breakdown (IPB) and provide data for identification, issuance, or requisition of selected parts, components, or assemblies. When a bulletin affects the IPB, it is incorporated in the manual at the next available opportunity. Refer to the bulletin record (page BR) for the list of bulletins that have been incorporated in the manual.



Temporary Revisions (TR) are published when necessary. TRs supersede the content of the IPB on the applicable page range. Refer to the temporary revision record (page TR) for a list of active temporary revisions against the manual.

1-4. ILLUSTRATED PARTS BREAKDOWN AND ASSOCIATED DOCUMENTS — CUSTOMER FEEDBACK

Bell Helicopter Textron (BHT) strives to provide you, the customer, accurate and straightforward manuals. Sometimes, we may make mistakes. If you find any mistakes, we would appreciate it if you told us. Your observation, suggestion, or complaint will be acknowledged.

For your convenience, we have included a Customer Feedback form at the beginning of the Illustrated Parts Breakdown (IPB). You can send it by fax or mail it to us. When you tell us about a mistake that is found in the IPB, please be as specific as possible. Your help to make sure that this publication is correct is very much appreciated.

#### 1-5. USE OF THE MANUAL

The information provided in the Illustrated Parts Breakdown (IPB) and those modified either by Alert Service Bulletins (ASB) issued by Bell Helicopter Textron (BHT), or by Airworthiness Directives (AD) issued by the local Aviation Authority, shall be followed.

# 1-6. USE OF THE MANUAL — DOCUMENT STRUCTURE

The breakdown of the helicopter into systems within the Illustrated Parts Breakdown (IPB) is done under a modified Air Transport Association (ATA) chapter system.

## NOTE

A list of all the chapters contained in this manual is also provided at the beginning of the IPB (page i/ii).

The IPB contains 25 chapters and each of these uses the same numbering as in the Maintenance Manual

(BHT-212-MM) and the Component Repair and Overhaul Manual (BHT-212-CR&O) to help with cross-references between manuals. The chapters of the IPB are as follows:

CHAPTER	TITLE
Chapter 1	General Information
Chapter 8	Weight and Balance
Chapter 10	Parking and Mooring
Chapter 11	Placards and Markings
Chapter 21	Air Distribution (Ventilation)
Chapter 25	Equipment and Furnishings
Chapter 26	Fire Protection
Chapter 28	Fuel System
Chapter 29	Hydraulic System
Chapter 30	Ice and Rain Protection
Chapter 32	Landing Gear
Chapter 52	Doors and Windows
Chapter 53	Fuselage
Chapter 62	Main Rotor
Chapter 63	Main Rotor Drive System
Chapter 64	Tail Rotor
Chapter 65	Tail Rotor Drive System
Chapter 67	Flight Controls
Chapter 71	Power Plant
Chapter 76	Engine Controls
Chapter 79	Engine Oil System
Chapter 95	Instrument System
Chapter 96	Electrical System
Chapter 97	Avionics
Chapter 99	Kits

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A Table of Contents (TOC) is provided at the beginning of every chapter of the IPB. Except in Chapter 1, each TOC reflects the breakdown of the chapter into one or more figures.

The TOC also provides Chapter/Section numbers (e.g., 64-99-00), which identify the chapter associated with the figure (e.g., Chapter 64), the type of manual (99 being the default number for the IPB), and the section, if any (00 being the default number if the chapter is not broken down into sections).

#### **NOTE**

In the Alphabetical Numerical Index, page numbers are preceded by Part Number.

In the Reference Designator Index, page numbers are preceded by Ref. Des.

Throughout the manual, the page numbering uses a sequence number, starting at 1 at the beginning of each chapter.

The paragraph numbering in Chapter 1 uses a combination of the chapter number followed by a sequence number, starting at 1 (e.g., paragraph 1-6).

# 1-7. USE OF THE MANUAL — REVISION STATUS AND LIST OF EFFECTIVE PAGES

The revision status of the manual is provided in the log of revisions at the beginning of the Illustrated Parts Breakdown (IPB) (page A) and on the title page of the manual. The log of pages (starting on page A) provides the revision status of every page in the manual.

# 1-8. USE OF THE MANUAL — FIGURE LAYOUT

The figures contained in Chapter 8 through Chapter 99 consist of illustration page(s) and text page(s). Illustration pages are in exploded form and arranged in a manner to depict the relationship of the parts listed on the text page. Guidelines are used to further clarify this relationship.

The figure numbering uses a combination of the chapter number followed by a sequence number, starting at 1 (e.g., Figure 64-3). The figure number is shown at the bottom of the illustration page and at the top of the text page.

### 1-9. Figure Layout — Index Number

The numbers appearing in column (1) of each text page link the text to the illustration. The index number provides a cross-reference from the part number appearing on the text page to the illustrated view of the part or component on the accompanying illustration.

When one figure depicts both left-hand and right-hand (LH/RH) assemblies or parts, the LH configuration is illustrated, unless otherwise specified.

When both the LH and RH assemblies are identical the quantity listed is for both LH and RH. The quantity for the detail parts only includes those needed for one assembly.

Part numbers that are shown on the text page without index numbers are items that are not procurable, such as an installation, but the detail parts listed below them are procurable. These parts may be purchased if they are ordered in accordance with the instructions of paragraph 1-23.

#### 1-10. Figure Layout — Part Number

Five different types of part numbers may be found in column (2) of the text pages, as follows:

- Bell Helicopter Textron (BHT) part numbers (e.g., 212-030-245-107)
- Military Standard part numbers; these start with AN, M, MS, or NAS.
- Vendor part numbers; these have no particular type and are listed as defined by the manufacturer
- Standard BHT part numbers (e.g., 120-079-10-6)
- Spare parts with alphabetical suffixes denote the part is a spare or replacement part, rather than an original production part (e.g., 212-010-100-101S or 212-010-100-101A).

#### 1-11. Figure Layout — Item Name

The nomenclature of the part is identified in column (3) as defined in Engineering and Industry Standard.

**Indentations** – The indentation system shows the relationship of one part to another. For a given item,



the number of indentures depicts the relationship of the item to the associated next higher assembly, as follows:

> 1 2 3 4 5 6 7 Assembly

- . Detail part for assembly
- .. Subassembly
- ... Detail parts for subassembly

**Similar Assemblies** – When similar assemblies are broken down, any peculiarities are noted by adding a note in the column with the term USABLE ON followed by the serial number and part number of the Next Higher Assembly (NHA) for that part.

Alternate Parts – When the use of alternate parts is permitted, the part number of the acceptable alternate is shown immediately after the preferred part with the same indenture level. The alternate part is separated from the preferred part by the words alternate part or parts.

**Special Notations** – The word NOTE and the reference number pertaining to that note will follow the nomenclature of items that require special attention. An example would be parts that must be replaced in matched sets.

**Replaced By** – This phrase is used in the description of a part number that has been superseded by an improved part. Assets of the original part should be used until depletion.

**Replaces** – This phrase is used in the description of the improved part. This part is one way interchangeable and should only be used when assets or the original part has been depleted.

### 1-12. Figure Layout — Unit Per Assembly

Column (4) indicates the quantity of the item required for one assembly only. When parts are shown as attaching two or more items, the quantity of these parts are those necessary to attach only one of the items. The abbreviation REF indicates that the quantity required will be found on the figure reference in the nomenclature or that the information is for reference purposes only.

#### 1-13. Figure Layout — Availability Codes

#### NOTE

Availability codes may have been revised since this publication has been printed. Please contact your supply center or the Bell Helicopter Spares Administration Center at (817) 280-2551, or by email: vista@bellhelicopter.textron.com.

#### NOTE

Not all operators have access to CO-OP.

Column (5) provides the availability code, which denote the procurability of parts. To help identify if a part is procurable an alphabetical code is used, which is designed to match stock codes in CO-OP.

**Alphabetical Availability Codes** – The alphabetical availability code is based on the stock class and stock status code shown in CO-OP. Some part numbers will not have availability codes because they are Installation parts, not listed in CO-OP or are indexed for customer convenience.

A table has been added to the last page of each figure that contains an abbreviated definition of the codes. An expanded definition follows:

P - Procurable part

- Stock class is non-stock.
- · Stock status is active or inactive.

NP - Non Procurable part.

- Stock class is non-stock.
- · Stock status is obsolete.
- Part number is an installation drawing, which is not listed in CO-OP.
- Part number can be a Next Higher Assembly (NHA), which is not procurable but its detail parts are, or the opposite.

SP - Normal Stock/Procurable.

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### 1-14. Figure Layout — Usable-On-Code

The Usable-On-Code (UOC) in column (6) is not used in the Illustrated Parts Breakdown (IPB) of the Model 212 helicopter.

# 1-15. Figure Layout — Effectivity

**Unlimited** – When a part is effective on all helicopters identified in a figure, the Serial Number (S/N) is not used.

**Limited** – When a part is effective only on certain helicopters identified in a figure, the S/N is used.

**Replaced Part** – If the part has a limited effectivity, it will have a S/N that covers only that effectivity.

Replaces Part – The replacing part number will contain the S/N that covers the effectivity of the replaced part and replacement part combined. If the combined effectivity of the original and replacement part numbers include all serial numbers that pertain to the applicable model block covered in the figure, no effectivity will be listed.

# 1-16. Figure Layout — Pre and Post Alert Service Bulletin (ASB)/Technical Bulletin (TB)/Installation Instruction (II)

The word PRE followed by the ASB/II/TB number (e.g., PRE ASB 212-10-36) will follow the nomenclature of items that have been replaced by the bulletin or instruction. The word POST followed by the ASB/II/TB number (POST ASB 212-10-36) will follow the nomenclature of items that are needed to incorporate the requirements of the bulletin or instruction.

### 1-17. Figure Layout — Stacked Index Numbers

Index numbers are stacked on two occasions, they are as follows:

- **1.** When items can easily be identified on the illustration and an exploded view is not needed.
- 2. When there are two or more identical items broken down, one of the items will be in an exploded view showing all the details indexed and the other items will have the index numbers stacked.

#### 1-18. Figure Layout — Parts Relationship

Each part on the text page of the Illustrated Parts Breakdown (IPB) is indented to indicate relationship. Each part is indented to the right of its next higher assembly. When the details of an assembly are shown on a different figure, the nomenclature of the assembly is followed by the notation SEE FIG. XX-XX FOR BREAKDOWN. If an assembly is broken down in more than one figure the notation SEE FIG. XX-XX FOR BALANCE OF BREAKDOWN will be shown.

# 1-19. USE OF THE MANUAL — ALPHABETICAL NUMERICAL INDEX

The Alphabetical Numerical Index, also called Index of Part Numbers, is located at the end of the Illustrated Parts Breakdown (IPB), before the Reference Designator Index.

#### **NOTE**

Supplements have their own index located at the end of the applicable document (Chapter 99).

This index lists in alpha-numerical order all the part numbers found in Chapter 8 through Chapter 97.

Cross-references are made to the applicable chapter, figure, item (index number), and reference designator in the IPB.

# 1-20. USE OF THE MANUAL — REFERENCE DESIGNATOR INDEX

The Reference Designator Index, also called Index of Reference Designators, is located at the end of the Illustrated Parts Breakdown (IPB), after the Alphabetical Numerical Index.

#### NOTE

Supplements have their own index located at the end of the applicable document (Chapter 99).

This index lists in alpha-numerical order all the reference designators found in Chapter 8 through Chapter 97.

Cross-references are made to the applicable chapter, figure, item (index number), and part number in the IPB.



#### 1-21. USE OF THE MANUAL — FINDING PARTS

- **1.** When the part number is known, find a part as follows (Figure 1-1):
- **a.** Locate the part number in the Alphabetical Numerical Index (paragraph 1-19).
- **b.** Note the chapter number, figure number, and item number against the part number.
- **c.** In the Table of Contents (TOC) of the chapter, find the applicable figure.
- **d.** On the text page of the figure, locate the item in the Index Number column.
- 2. When the part number is not known, find a part as follows (Figure 1-2):
- **a.** In the List of Chapters (page i/ii), determine the chapter in which that part is most likely to appear.
- **b.** In the Table of Contents (TOC) of the chapter, determine the figure in which the part might be shown.
- **c.** On the illustration page of the figure, locate the part.
- **d.** On the illustration page of the figure, note the index number against the part.
- **e.** On the text page of the figure, locate the item in the Index Number column.
- **3.** When the reference designator is known, find a part as follows (Figure 1-3):
- **a.** Locate the reference designator in the Reference Designator Index (paragraph 1-20).
- **b.** Note the chapter number, figure number, and item number against the reference designator.
- **c.** In the Table of Contents (TOC) of the chapter, find the applicable figure.
- **d.** On the text page of the figure, locate the item in the Index Number column.

#### 1-22. HANDLING OF CUSTOMER ORDERS

All orders for parts will be filled in the shortest possible time, with orders of any emergency nature given special attention. Items not stocked will be placed on back order and the customer will be notified of the shipment date.

The method of transportation on shipments will be as assigned by the customer. When no such designation is made, method of transportation will be by most expeditious means, at the discretion of Bell Helicopter Textron (BHT).

Parts are shipped on open account to all customers with an approved credit rating with BHT. All other orders are shipped Collect On Delivery (COD).

When shipping charges are prepaid, as on parcel post, the amount of the charges will be added to the customer invoice.

#### 1-23. ORDERING INSTRUCTIONS



DO NOT USE PARTS ON COMMERCIAL HELICOPTERS THAT HAVE BEEN PREVIOUSLY USED ON MILITARY HELICOPTERS. PARTS MAY BE INSTALLED AS ORIGINAL EQUIPMENT ON BOTH MILITARY AND COMMERCIAL HELICOPTERS. THESE PARTS MAY HAVE A LOWER RETIREMENT LIFE AND/OR TIME BETWEEN OVERHAUL (TBO) WHEN USED ON MILITARY HELICOPTERS. ALSO CIRCUMSTANCES SURROUNDING THEIR USE MAY CALL FOR OPERATION OF MILITARY HELICOPTERS OUTSIDE OF THE MILITARY APPROVED **FLIGHT** ENVELOPE.

Order parts by part number and nomenclature as shown in the Illustrated Parts Breakdown (IPB). Do not order by nomenclature alone.

When ordering parts, provide the model and Serial Number (S/N) of the helicopter on the order to ensure shipment of the correct part. Clearly state the shipping address and any other pertinent information.

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# Bell Helicopter BHT-429-IPB **Bell** Helicopter INDEX - PART NUMBERS — IPB REFERENCE DESIGNATION CHAPTER, REFERENCE FIGURE & DESIGNATION ITEM 1 8010MG1, 8010MG2 05 1 8010MG1 206-062-200-143 71 -(1) Bell Helicopter UNIT V U PER A O ASSY I C INDEX PART NUMBE ITEM NAME Figure 71-5 ANCE OF BREAKDOWN) I (SEE FIG. 71-2 FOR NHA) (SEE FIG. 71-3, 71-9 129-060-101-105 1 WASHER MOUNTING KIT CLAMP HOUSING, QAD KIT NOTE 1: SEE FIG. 71-6 FOR 200 AMP STARTER GENERATOR KII (BHT-429-II-10) (3) 19 JUN 2009 DEFINITION 2

## HOW TO USE THE ILLUSTRATED PARTS BREAKDOWN

WHEN THE PART NUMBER IS KNOWN

FOR BEST VALUE, BUY GENUINE BELL PARTS

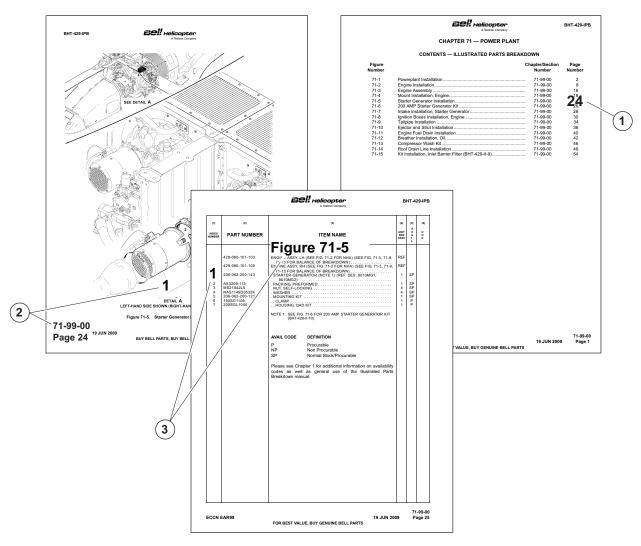
- 1. When the part number is known, refer to the Index of Part Numbers IPB. Find the part number and make a note of the chapter, figure, and item number specified to the part number.
- 2. Turn to the chapter and figure number specified. Find the item number referenced in the index of Part Numbers IPB.
- 3. If a representation of the part or its location is necessary, refer to the same item number on the adjacent illustration.

429\_IPB\_01\_0001

Figure 1-1. Finding Parts — Part Number (P/N) is Known (Example)



## HOW TO USE THE ILLUSTRATED PARTS BREAKDOWN



WHEN THE PART NUMBER IS NOT KNOWN

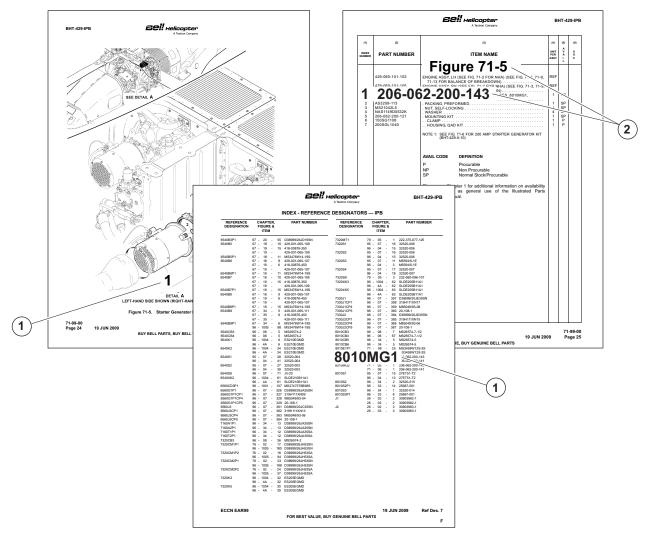
- 1. Specify the function and application of the part required. Turn to the Contents IPB and pick the most applicable title. Make a note of the illustration page number.
- 2. Turn to the page specified and find the necessary part on the illustration.
- 3. From the illustration, get the item number identified to the part that is necessary. Refer to the adjacent description for the specific information of the part.

429\_IPB\_01\_0002

Figure 1-2. Finding Parts — Part Number (P/N) is Not Known (Example)



## HOW TO USE THE REFERENCE DESIGNATOR INDEX



#### WHEN THE REFERENCE DESIGNATOR IS KNOWN

- 1. When the reference designator is known, refer to the index of Reference Designators IPB. Find the reference designator and make a note of the chapter, figure, and index numbers and part number specified.
- 2. Turn to the chapter and figure number identified. Find the index number reference in the index of Reference Designators IPB.
- 3. If a pictorial representation of the part or its location is necessary, refer to the same index number on the adjacent illustration.

429\_IPB\_01\_0003

Figure 1-3. Finding Parts — Reference Designator (REF DES) is Known (Example)



When ordering parts not manufactured by Bell Helicopter Textron (BHT), provide the name of the manufacturer on the order and any other information that appears on the old part.

Orders for spare parts, unless otherwise directed by BHT, should be addressed to the following:

Bell Helicopter Textron Inc.

P.O. Box 482 Fort Worth, TX 76101 USA

BHT reserves the right to supply substitute parts, interchangeable with the part ordered wherein design changes, later specifications, conditions of supply, or product improvement make said substitution necessary.

#### 1-24. NOTES ON TORRINGTON BEARINGS

Bearings referred to in this Illustrated Parts Breakdown (IPB) by Torrington's name, vendor code, and/or commercial catalogue part number were manufactured by Torrington as catalogue bearings and were not specifically manufactured by Torrington for use in helicopter applications.

These bearings have been approved by Bell Helicopter Textron (BHT) to BHT design requirements for the specified helicopter applications.

The helicopter applications for these bearings have not been approved, authorized, or endorsed by Torrington.

## 1-25. ABBREVIATIONS AND ACRONYMS

Abbreviations and acronyms used throughout the Illustrated Parts Breakdown (IPB) are defined as follows:

4PDT — Four Pole Double Throw

AC — Alternating Current

ACP — Audio Control Panel

AD — Airworthiness Directive

ADAHRS — Air Data and Attitude/Heading

Reference System

ADC — Air Data Computer

ADF — Automatic Direction Finder

ADI — Attitude Direction Indicator

ADIU — Aircraft Data Interface Unit

ADMM — Aircraft Data Memory Module

ADS — Air Data System

AEO — All Engines Operative

A/F — Airframe

AF — Automatic Fixed

AFCS — Automatic Flight Control

System

AGL — Above Ground Level

AL — Aluminium
ALT — Altimeter

AMLCD — Active Matrix Liquid Crystal

Display

AMP — Ampere

AOG — Aircraft-On-Ground
ASB — Alert Service Bulletin

ASSY — Assembly

ATA — Air Transport Association

ATC — Air Traffic Control

ATCRBS — Air Traffic Control Radar

Beacon System

AUX. or Aux. — Auxiliary

AVAIL — Availability

BAT — Battery

BHT — Bell Helicopter Textron

BIT — Built-In Test

BKR — Breaker

BL — Butt Line

BLHD — Bulkhead

BNC — Bayonet Neill-Concelman

BND — Bonded

bps — Bits per Second

BRG — Bearing
BRKT — Bracket

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BS	_	Boom Station	DMU	_	Diagnostic and Maintenance
ВТ	_	Butt Line			Unit
°C	_	Degrees Celsius	DOT	_	U.S. Department of Transportation
CAS	_	Crew Alerting System	DPDT	_	Double Pole Double Throw
СВ	_	Circuit Breaker	DPST	_	Double Pole Single Throw
CD	_	Compact Disc	DR	_	Door
CD-ROM	_	Compact Disc Read Only Memory	D/S	_	Driveshaft
CF	_	Centrifugal Force	DSTN	_	Double-layer Super Twist Nematic
CFM	_	Cubic Feet per Minute	DU	_	Display Unit
CG	_	Center of Gravity	DWG	_	Drawing Drawing
CHFD	_	Course Heading Flight	EADI		Electronic Attitude Direction
		Director	EADI	_	Indicator
$C_L$	_	Center Line	ECS	_	Environmental Control
CLP	_	Collective Lever Position			System
cm	_	Centimeter	ECU	_	Engine Control Unit
COD	_	Collect On Delivery	EDR	_	Electronic Data Recorder
COM	_	Communication	EEC	_	Electronic Engine Control
COMPT	_	Compartment	EEPROM	_	Electrically Erasable
CONT or Cont	_	Continuation			Programmable Read Only Memory
CPU	_	Central Processing Unit	e.g.	_	Exempli gratia (for example)
CR&O	_	Component Repair & Overhaul Manual	EHSI	_	Electronic Horizontal Situation Indicator
CTR	_	Center	EICAS	_	Engine Indicating and Crew Alerting System
CYL	_	Cylinder	ELEC		Electrical
DC	_	Direct Current	ELEV	_	Elevator
DEG	_	Degree	ELT	_	Emergency Locator
DG	_	Directional Gyro	LLI		Transmitter
DH	_	Decision Height	EMF	_	Electromotive Force
DIA. or Dia.	_	Diameter	ENG	_	Engine
Dim.	_	Dimension	EQUIP	_	Equipment
DISC	_	Disconnect	ET	_	Elapsed Time
DISTR	_	Distribution	EWIS	_	Electrical Wire
DME	_	Distance Measuring			Interconnection System
		Equipment	EXT	_	External
DMITS		Diagnostic and Maintenance Information Transfer System	°F	_	Degrees Fahrenheit



FAA	_	Federal Aviation	HYD	_	Hydraulic
IAA	_	Administration	IAS	_	Indicated Air Speed
FCC		Flight Control Computer	IAS	_	Integrated Avionics System
FIG	_	Figure	IBIT		Initiated BIT
FM		Flight Manual	ICS		Intercommunication System
FMM		Fuel Management Module	I.D.		Inner Diameter
FMS		Flight Management System	IDENT		Identification
FMV		Fuel Metering Valve	i.e.	_	Id est (that is)
FOD		Foreign Object Damage	IFR	_	Instrument Flight Rules
FPI		Fluorescent Penetrant	IGE	_	In-Ground Effect
		Inspection	IHM	_	Integrated Hydraulic Module
FS	_	Fuselage Station	II		Installation Instruction
FT	_	Foot, Feet	ILS		Instrument Landing System
FTG	_	Fitting	IN.	_	Inch
F/W		Firewall	INBD	_	
FWD	_	Forward		_	Inboard
GAG	_	Ground-Air-Ground	INSTL	_	Installation
GAL	_	Gallon	INSTR	_	Instruction
GB	_	Gearbox	I/O	_	Input/Output
GEN		Generator	IPB	_	Illustrated Parts Breakdown
GND	_	Ground	ISA	_	International Standard Atmosphere
GPS	_	Global Positioning System	IWTS		Integrated Wire Termination
GPS	_	Ground Proximity System	10010		System
GPU	_	Ground Power Unit	KG or kg	_	Kilogram
GRCU	_	Generator Regulator Control Unit	KPA or kPa (∆kPa)	_	Kilopascal (differential)
GSE	_	Glideslope	kW	_	Kilowatt
GSE	_	Ground Support Equipment	L	_	Liter
GUI	_	Graphical User Interface	LB(S)	_	Pound(s)
GVI	_	General Visual Inspection	LBL	_	Left Butt Line (–)
GW	_	Gross Weight	LCD	_	Liquid Crystal Display
Нр	_	Horsepower	LCTN	_	Location
HRS	_	Hours	LDG	_	Landing
HSI	_	Horizontal Situation Indicator	LED	_	Light Emitting Diode
HSR	_	Historical Service Record	L/HIRF	_	Lightning and High Intensity
HTR	_	Heater			Radiated Frequency
HUMS	_	Health and Usage Monitoring	LH(S)	_	Left Hand (Side)
		Systems	LHE	_	Low Hydrogen Embrittlement

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I IV/E		Lincold In outin Vibration	N.I		Davisa Turkina Casad
LIVE	_	Liquid Inertia Vibration Eliminator	N <sub>2</sub>	_	Power Turbine Speed
LLS	_	Lightning Sensor System	N/A	_	Not Applicable
LLS	_	Low Level Sensor	NAS	_	National Airspace System
LOC	_	Localizer	NAV		Navigation
LPS	_	Lighting Power Supply	NDT	_	Non-Destructive Testing
LT	_	Local Time	N <sub>F</sub>	_	Output Shaft Speed
LTF	_	Lead-The-Fleet	$N_{G}$	_	Gas Producer Speed
LRU	_	Line Replaceable Unit	NHA	_	Next Higher Assembly
LVDT	_	Linear Variable Differential	NLG	_	Nose Landing Gear
		Transducer	NO. or No.	_	Number
LWR	_	Lower	N <sub>P</sub>	_	Power Turbine Speed
m	_	Meter	$N_R$	_	Rotor Speed
MAINT	_	Maintenance	NVM	_	Non-Volatile Memory
MANF	_	Manifold	OAT	_	Outside Air Temperature
MAX or Max	_	Maximum	O.D.	_	Outer Diameter
MECH	_	Mechanism	OEI	_	One Engine Inoperative
MEK	_	Methyl Ethyl Ketone	OGE	_	Out-of-Ground Effect
MEMS	_	Micro Electro-Mechanical	OPP	_	Opposite
		Sensor	OT	_	Other Traffic
MFD	_	Multi-Function Display	OUTBD	_	Outboard
MGT	_	Measured Gas Temperature	OVHD	_	Overhead
MID	_	Middle	OZ	_	Ounce
MIN or Min	_	Minimum	PA	_	Proximate Advisory
MIN or Min	_	Minute	PASS	_	Passenger
ml	_	Milliliter	PAV	_	Pressure Adjustment Valve
MLG	_	Main Landing Gear	PAX	_	Passenger
mm	_	Millimeter	PBA	_	Pushbutton Annunciator
MM	_	Maintenance Manual	PC	_	Personal Computer
MOD	_	Modification	PCB	_	Printed Circuit Board
MOP	_	Main Oil Pressure	PDP	_	Power Distribution Panel
MOT	_	Main Oil Temperature	PFD	_	Primary Flight Display
M/R	_	Main Rotor	PLA	_	Power Lever Angle
MSG-3	_	Maintenance Steering Group	PLT	_	Pilot
		– 3rd Task Force	PMM	_	Permanent Magnet Motor
MSI	_	Maintenance Significant Item	P/N	_	Part Number
MTG	_	Mounting	PNL	_	Panel
$N_1$	_	Gas Producer Speed	POS	_	Position or Positive



PRESS	_	Pressure	RS-232	_	Recommended Standard 232
PSE	_	Product Support Engineering	RTA	_	Receiver Transmitter Antenna
PSI	_	Pound-force per Square Inch	RTD	_	Resistance Temperature
PSI	_	Power Situation Indicator			Detector
PSID	_	Pound-force per Square Inch Differential	RVDT		Rotary Variable Differential Transducer
PSIG	_	Pound-force per Square Inch	SAR	_	Search and Rescue
		Gauge	SCAS	_	Stability and Controllability
PSR	_	Primary Surveillance Radar	CDD		Augmentation System
PWA	_	Printed Wiring Assembly	SDR	_	Service Difficulty Report
PWR	_	Power	SEL	_	Selector
${\sf Q}$ or ${\sf Q}_{\sf E}$	_	Engine Torque	SI	_	Service Instruction
QAD	_	Quick Attach-Detach	S/N	_	Serial Number
QC	_	Quiet Cruise	SPECTOOL	_	Special Tools
$Q_{T}$	_	Total Torque	SPI	_	Special Position Identification
QTY or Qty	_	Quantity	SPM	_	Standard Practices Manual
RA	_	Radar Altimeter	SPRT	_	Support
RAIM	_	Receiver Autonomous	SPST	_	Single Pole, Single Throw
		Integrity Monitoring	SRM	_	Structural Repair Manual
RAM	_	Random Access Memory	SSR	_	Secondary Surveillance Radar
RBL	_	Right Butt Line (+)	CTA		
RBY	_	Replaced by	STA	_	Station Station
RCCB	_	Remote Control Circuit	STA	_	Supplement Type Approval
D.O.) (D.		Breaker	STC	_	Supplement Type Certificate
RCVR	_	Receiver	STNCL	_	Stencil
REF	_	Reference	SYS	_	System
REF DES	_	Reference Designator	TA	_	Traffic Advisory
RF	_	Radio Frequency	TACH	_	Tachometer
RGB		Red-Green-Blue	ТВ	_	Technical Bulletin
RH(S)	_	Right Hand (Side)	TBO	_	Time Between Overhaul
RID	_	Rotary Input Device	TCA	_	Time to Closest Approach
RIN	_	Retirement Index Number	TCA	_	Transport Canada Aviation
RMS	_	Roughness Measurement System	TCAS	_	Traffic Collision Avoidance System
ROM	_	Read Only Memory	TEMP	_	Temperature
ROT	_	Rate of Change	TERM	_	Terminal
RPL	_	Replaces	TIR	_	Total Indicated Runout
RPM	_	Revolutions Per Minute	TIR	_	Total Indicator Reading

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TIS — Traffic Information System

TNC — Threaded Neill-Concelman

TOC — Table of Contents

T/R — Tail Rotor

TR — Temporary Revisions
UHF — Ultra High Frequency

UPR — Upper

U.S. — United States

USB — Universal Serial Bus

USBL — Usable

USG — U.S. Gallon

UTC — Coordinated Universal Time

VAC — Volts of Alternating Current

VDC — Volts of Continuous Current

VFR — Visual Flight Rules

VHF — Very High Frequency

VNE — Never Exceed Speed

VOR — VHF Omnidirectional Range
VOX — Voice Operated Squelch
VRLA — Valve Regulated Lead-Acid

VS — Vertical Speed

VSWR — Voltage Standing Wave Ratio

WAAS — Wide Area Augmentation

System

W/C/A — Warning/Caution/Advisory

WD — Wiring Diagram

WECU — Wiper Electronic Control Unit

WL — Water Line

WMS — WAAS Master Station

WOG — Weight On Gear

WRG — Wiring

WRS — Wide Area Reference Stations

WSHLD — Windshield
WXR — Weather Radar
XCVR — Transceiver
XMSN — Transmission
XPDR — Transponder