

ROBINSON HELICOPTER COMPANY

R44 ILLUSTRATED PARTS CATALOG

RTR 460 VOLUME II

Production Certificate Number 424WE

Type Certificate Number H11NM



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OFFICE HOURS

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HOLIDAYS

Please visit www.robinsonheli.com for a complete list of holidays and company shutdowns.

CUSTOMER SUPPORT

Please visit www.robinsonheli.com for a complete support directory.

Procure parts from any R44 Dealer or Service Center, or order directly from assigned RHC Customer Support Representative via email, fax, or phone.

PUBLICATIONS

Please visit www.robinsonheli.com to view our publications electronically.

SUBSCRIPTION ORDER AND RENEWAL FORMS

Subscription order and renewal forms are located at www.robinsonheli.com.

WARRANTY INFORMATION

Helicopter and parts warranty information is located at www.robinsonheli.com.

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TECHNICAL PUBLICATIONS
RECOMMENDED CHANGE REPORT

Please direct recommended changes to RHC Technical Publications via the email address listed below, by phone, or by submitting a duplicate of this completed form by fax or mail. Please include or have available the information detailed by this form.

Recommended changes may include but are not limited to: general comments, corrections, omitted information, or clarification of instructions.

Please send recommendations to:

Email: techpubs@robinsonheli.com
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Robinson Helicopter Company
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Date: _____
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Serial Number: _____
Phone: _____
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Publication: _____
Chapter: _____
Section: _____
Page: _____
Revision: _____

COMMENTS:

CATALOG FEATURES

INTRODUCTION

The Illustrated Parts Catalog (IPC) is used in conjunction with the R44 Maintenance Manual (MM) to provide instructions for continued airworthiness. The IPC identifies parts, components, and detail parts that make up, and are required to support, the R44 helicopter. RHC uses a modified Air Transport Association (ATA) chapter structure to organize the various systems of the R44 Helicopter.

The catalog features:

1. A chapter list
2. A table of contents located in the front of the catalog
3. A table of contents at the front of each chapter
4. Alphabetical and numerical indexes located in the appendices at the back of the catalog

PART DESIGNATION

Robinson parts are designated with a part number prefix "A", "B", "C", etc., followed by three digits and a dash number, such as A101-1. Robinson special tools are designated with a part number prefix "MT". For standard hardware items such as bolts, nuts, screws, etc., "AN", "MS", and "NAS" part numbers are used. When a rivet length is not specified, length must be determined by the installer. In some instances, vendor part numbers are also used.

PARTS AVAILABILITY

"X" indicates part is available as a separate spares item.

"O" indicates part is no longer available, or only available as part of a higher assembly.

CHANGE BARS

Change bars are located on the outside edge of the page, and indicate new or revised data. Change bars between lines indicate data was removed, and parts renumbered as required. Change bars on figure pages indicate changes to the figure somewhere across the page in the area of the change bar. A change bar encompassing the figure title and item 1 indicates the figure number changed. Change bars that are the full length of the page indicate all new data, usually a new figure and parts data.

ABBREVIATIONS

Assy – assembly	max – maximum	rev. – Revision
A/R – as required	min – minimum	RH – right hand
A.O.G. – Aircraft On Ground	MM – Maintenance Manual	RHC – Robinson Helicopter Company
Cont'd – continued	MR – main rotor	§ – Section
Incl – includes	OH/EXCH – Overhaul/Exchange	TR – Tail Rotor
LH – left hand	Ref – Part(s) "referenced" for clarity	TRDS – Tail Rotor Drive Shaft

ORDERING AND SHIPPING

All orders must include instructions for shipping. All parts or components shipped to RHC must include a signed Component Return/Authorization Form. Return shipments must be paid for by the dealer or distributor. NOTE: Handling fees will be applied to all orders received which are under \$1,000.00. Orders shipped on an A.O.G. basis (24 hours domestic, 48 hours foreign) will be assessed additional charges.

WARRANTY

RHC will apply the same 1-year or 1000-hour RHC limited warranty to all parts and components purchased from RHC.

RETURNS

No unused parts may be returned to RHC for credit if the parts show any indication whatsoever of use or damage, or if the cost of the individual part was less than \$25 (U.S.). Parts returned within 30 days of purchase will be assessed a 20% restocking fee. No parts may be returned after 30 days without prior RHC approval. Any parts approved for return after 30 days will be assessed a 50% restocking fee.

Continued

CATALOG FEATURES (Cont'd)**REVISIONS**

Before using this catalog, be sure it is current. A list of all pages is located in Chapter 100, Revision Log, at the back of this catalog. If a new parts catalog is purchased, be sure to complete the Subscription Order and Renewal Form found on www.robinsonheli.com; this will ensure receipt of revisions for a two-year period. Revision status of Robinson Technical Publications is at www.robinsonheli.com.

RHC reserves the right to cancel, add, or change the parts and assemblies described in this catalog without notice.

HOW TO USE THE ILLUSTRATED PARTS CATALOG

Below are search protocols, based on the information known:

If searching by part number:

1. Digital Catalog:

The IPC is available online in digital PDF format.

- a. Open the chapter PDF or the full book PDF in the PDF reader of your choice.
- b. In your PDF reader open a "search" or "find" window and type in the p/n you are looking for.
- c. All instances of that p/n should be found, and you can move through the list until you find the information you are looking for.

2. Paper Catalog:

- a. Go to Appendix B, the Numerical Index, and locate the part number.
- b. You will find where that part number is called out in the Illustrated parts Catalog (IPC).
The Numerical Index is divided into six sections, RHC part numbers, RHC "KI" (kit) numbers, RHC "MT" (tool) numbers, RHC "R" numbers (specialty parts), vendor part numbers, and standard hardware part numbers.
Note: Vendor part numbers are sorted by column from left to right numerically then alphabetically, and all hyphens are ignored for sorting purposes. i.e.- "75-900-2026" comes before "760", and "760" comes after "A15A".
- c. Note the page(s) and item number(s) listed.

If searching by part name:

1. Digital Catalog:

The IPC is available online in digital PDF format.

- a. Open the chapter PDF or the full book PDF in the PDF reader of your choice.
- b. In your PDF reader open a "search" or "find" window and type the part name you are looking for.
- c. All instances of that part name should be found, and you can move through the list until you find the information you are looking for.

2. Paper Catalog:

- a. Go to Appendix A, the Alphabetical Index, and look for the name of the part, component, or system you are looking for.
- b. You may find listings under multiple names for some components. Only the most common parts, components, and systems are listed in the Alphabetical Index.
- c. Note the page(s) and item number(s) listed.

If searching by system:

1. Go to the Chapter List on page iii, and determine the appropriate chapter.
2. Go to the Table of Contents, or the Chapter Table of Contents, and further determine from the Figure titles the illustration where the part might logically appear.
3. Go to the Figure number and locate the part and its item number on the illustration.
4. Go to the item number noted in the parts list and verify it is the part you are looking for by reading the description. Be aware of any asterisks and the notes they reference, to verify the part is the current part for your aircraft. Find the part number in the illustration for location and associated hardware and/or components.

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PART INTERCHANGEABILITY

The following parts are interchangeable. Unless noted otherwise, whenever one part is referred to in this catalog, its substitute part is also permitted.

<u>PART:</u>	<u>INTERCHANGEABLE WITH:</u>
110-__ Telatemp	F110-__ Telatemp
22K1-048 Cap nut	B340-10 Cap nut
22K1-82 Cap nut	B340-4 Cap nut
354601 Fuse block	D262-1 Fuse block
354602 Fuse block	D262-2 Fuse block
4509 & Q4509 Lamp	B196-26 Lamp
4591 Lamp	B196-27 Lamp
511TS1-3 Switch	B300-4 Switch
94830A030 Nut	21FKF-518 Nut
AN_ and MS_ part	AS_ part or A880 part numbers.
AN340 Nut	MS35649 Nut per NASM35649 except AN340B8 Nut
AN340B8 Nut	B301-8 Nut
AN345 Nut	MS35650 Nut per NASM35650
AN364 Nut	MS21083 Nut per NASM21083
AN507 Screw	MS24693 Screw per NASM24693
AN509 Screw	MS24694 Screw per NASM24694
AN515 Screw	MS35206 Screw per NASM35206
AN515C Screw	MS51957 Screw
AN515UB6R6 Screw	B567-25 Screw
AN515UB6R10 Screw	B567-28 Screw
AN515UB8R10 Screw	B567-43 Screw
AN515UB8R12 Screw	B567-44 Screw
AN515UB8R20 Screw	MS35214-47 Screw per NASM35214
AN525 & AN526 Screw	MS27039C Screw per NASM27039, or B526-6 or -8 Screw and B527-08 Washer per R44 SL-51A. Except where noted.
AN814 & MS24391 Plug	AS5169 Plug
AN815 & MS24392 Union	AS5174 Union
AN818-__ D Nut	AN818-__ W Nut
AN819 & MS20819 Sleeve	AS5176 Sleeve
AN822 & MS20822 Elbow	AS5195 Elbow
AN823 & MS20823 Elbow	AS5196 Elbow
AN825 & MS20825 Tee	AS5197 Tee
AN826 & MS20826 Tee	AS5198 Tee
AN894 & MS24398 Bushing	AS5173 Bushing
AN900 Gasket	MS35769 Gasket per AS35769
AN924 & MS24400 Nut	AS5178 Nut
AN931 Grommet	MS35489 Grommet
AN935 Lockwasher	B332-__ Lockwasher, dash number per MS35338
AN936 Lockwasher	MS35335 Lockwasher
AN960-4L Washer	NAS1149FN416P Washer
AN960-4 Washer	NAS1149FN432P Washer
AN960-6L Washer	NAS1149FN616P Washer
AN960-6 Washer	NAS1149FN632P Washer
AN960-8L Washer	NAS1149FN816P Washer
AN960-8 Washer	NAS1149FN832P Washer
AN960-10L Washer	NAS1149F0332P Washer
AN960-10 Washer	NAS1149F0363P Washer

PART INTERCHANGEABILITY (Cont'd)

<u>PART:</u>	<u>INTERCHANGEABLE WITH:</u>
AN960-416L Washer	NAS1149F0432P Washer
AN960-416 Washer	NAS1149F0463P Washer
AN960-516L Washer	NAS1149F0532P Washer
AN960-516 Washer	NAS1149F0563P Washer
AN960-616L Washer	NAS1149F0632P Washer
AN960-616 Washer	NAS1149F0663P Washer
AN960-816L Washer	NAS1149F0832P Washer
AN960-816 Washer	NAS1149F0863P Washer
AN960-1016L Washer	NAS1149F1032P Washer
AN960-1016 Washer	NAS1149F1063P Washer
AN960PD8L Washer	NAS1149DN816J Washer
AN960PD416L Washer	NAS1149D0416J Washer
AN960PD516L Washer	NAS1149D0516J Washer
AN960PD616L Washer	NAS1149D0616J Washer
AVDEL 016 -__ Rivet	B204-__ Rivet
B270-6 Sealant	A701-11 Tape
CCR244SS-3-02 Rivet	B204-5 Rivet
MS26574-__ Circuit breaker	B297-__ Circuit breaker, except B297-25 and B297-120
MS3320-20 Circuit breaker	B297-120 Circuit breaker
LW-18959-150-25 Clamp	B444-1 Clamp
LW-18959-163-25 Clamp	B444-2 Clamp
LW-18959-175-25 Clamp	B444-3 Clamp
MS20604ML4W1 Rivet	MS20604M4W1 Rivet per NASM20604
MS21042L3 thru L6 Nut	D210-3 thru -6 Nut*
MS21209__ Insert	MS21209__ L or NAS1130__ Insert
MS21919__ Clamp	AS21919__ Clamp
MS24665 CAD plated steel cotter pin	MS24665 CRES cotter pin per NASM24665
MS27039C080__ Screw	B526-6 or -8 Screw and B527-08 Washer per R44 SL-51A. Except where noted.
MS27151-__ Palnut	B330-__ Palnut
NAS1067 Nutplate	MS21086 Nutplate per NASM21086
NAS1068A__ Nutplate	MS21075L__ E Nutplate per NASM21075
NAS1291-04 thru -08 Nut	MS21042 Nut per NASM21042
NAS1291-3 thru -10 Nut	D210-3 thru -10 Nut*
NAS1303 thru NAS1320 Bolt, except 1307 Bolt	NAS6603 thru NAS6620** Bolt, except 6607 Bolt
NAS1919B0__ SO__ Rivet	NAS9301B-__ -0__ Rivet
NAS1921B0__ SO__ Rivet	NAS9302B-__ -0__ Rivet
NAS428-__ -__ Bolt	NAS428-__ A__ Bolt
NAS487 Instrument nut	MS33737 Instrument nut per NASM33737
NAS679A__ Nut	NAS1291-__ Nut
NAS679C__ M Nut	NAS1291C__ M Nut
NAS696 Nutplate	MS21071 Nutplate per NASM21071
NAS697 Nutplate	MS21069 & MS21070 Nutplate per NASM21069 & NASM21070
NAS698 Nutplate	MS21073 Nutplate per NASM21073

* One-way interchangeability, only D210 nut shall be used for listed sizes.

** The following bolts must be NAS1300 series only: NAS1304-17 and NAS1305-35.

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