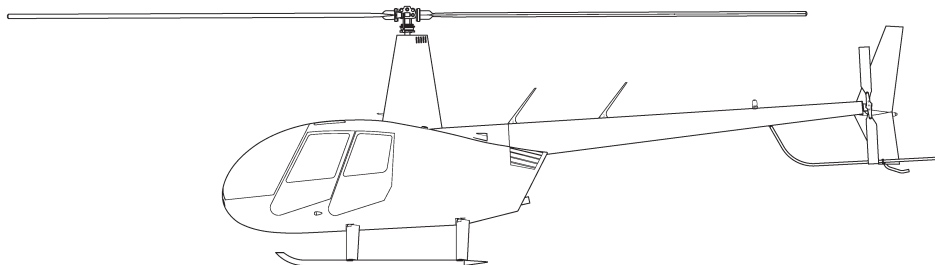


ROBINSON HELICOPTER COMPANY

R44 ILLUSTRATED PARTS CATALOG

RTR 460 VOLUME II

Type Certificate Number H11NM



Robinson Helicopter Company
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United States Of America

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TECHNICAL PUBLICATIONS
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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.

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CATALOG FEATURES**INTRODUCTION**

The catalog features:

1. A table of contents located in the front of the catalog.
2. Alphabetical and numerical indexes located in 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.

ABBREVIATIONS

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

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.

REVISIONS

Before using this catalog, be sure it includes all current revised pages. A list of revised pages is located in Chapter 100, Revision Log at the back of the catalog. If a new parts catalog is purchased, be sure to complete and mail the revision service application found in front of the catalog. This will ensure that you will receive all current revisions as they are published for a one-year period. The revision status of Robinson Technical Publications can be referenced on the Internet at www.robinsonheli.com.

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

PART INTERCHANGEABILITY

The following parts are interchangeable. Unless noted otherwise, whenever one part is referred to in this manual, 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
AN340 Nut	MS35649 Nut per NASM35649 except AN340B8 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
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 Screw and B527-08 Washer per R44 SL-51.
AN814 & MS24391 Plug	AS5169 Plug
AN815 & MS24392 Union	AS5174 Union
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 Nut & 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
AN960-416L Washer	NAS1149F0432P Washer
AN960-416 Washer	NAS1149F0463P Washer
AN960-516L Washer	NAS1149F0532P Washer

PART INTERCHANGEABILITY (continued)

<u>PART:</u>	<u>INTERCHANGEABLE WITH:</u>
AN960-516 Washer	NAS1149F0563P Washer
AN960-616L Washer	NAS1149F0632P Washer
AN960-616 Washer	NAS1149F0663P Washer
AN960-816L Washer	NAS1149F0816P Washer
AN960-816 Washer	NAS1149F0832P Washer
AN960-1016L Washer	NAS1149F1032P Washer
AN960-1016 Washer	NAS1149F1063P Washer
AN960PD8L Washer	NAS1149DN816P Washer
AN960PD416L Washer	NAS1149D0416J Washer
AN960PD516L Washer	NAS1149D0516J Washer
AN960PD616L Washer	NAS1149D0616J Washer
AVDEL 16__ Rivet	B204-__ 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*
MS21919DG__ Clamp	MS21919WDG__ clamp or AS21919 Clamp
MS27039C080__ Screw	B526 screw and B527-08 washer per R44 SL-51.
MS27151-__ Palnut	B330-__ Palnut
NAS1067 Nutplate	MS21086 Nutplate per NASM 21086
NAS1068A__ Nutplate	MS21075L__E Nutplate per NASM 21075
NAS1291-04 thru -08 Nut	MS21042 Nut per NASM21042
NAS1291-3 thru -6 Nut	D210-3 thru -6 Nut*
NAS1291-7 thru -10 Nut	D210-7 thru -10 Nut*
NAS1303 thru NAS1320 Bolt, except 1307 Bolt	NAS6603 thru NAS6620** Bolt, except 6607 Bolt
NAS1919B0__S0__ Rivet	NAS9301B-__0__ Rivet
NAS1921B0__S0__ 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.

LIMITED AIRCRAFT WARRANTY

Effective R22 S/N 3318 & on; R44 S/N 1202 & on

Robinson Helicopter Company, Inc. (hereafter referred to as RHC) warrants each new helicopter to be free from defects in material and workmanship appearing within two years from the date of delivery from the RHC factory or during the first one thousand (1000) hours of operation, whichever event occurs first; provided, the aircraft has been subjected to normal use and service. This Warranty is limited to repair or replacement on an exchange basis, as selected by RHC, of any part, which upon examination by RHC is deemed to have been defective when the aircraft left the factory. A new warranty period is not established for parts replaced under the terms of this Warranty. Such replacement parts are warranted only for the remainder of the original warranty period. This Warranty shall not apply to any helicopter or part which has been repaired or altered outside the factory, and which, in RHC's judgment, has affected the performance or reliability of the helicopter or part. This Warranty shall not apply to any helicopter or part which has been subject to corrosion, misuse, negligence or accident, nor to any parts normally replaced during routine maintenance, such as, air cleaners, skid shoes, rod end or spherical bearings, light bulbs, etc. This Warranty shall not apply to any helicopter, which has been crated for shipping unless such crating is performed by RHC. RHC is not responsible for the cost of shipping parts under the terms of this Warranty. However, RHC will credit the RHC Dealership, which sold and delivered the new helicopter to its original owner, with an allowance for labor performed by that Dealership for removing and reinstalling the defective part. No credit will be issued for trouble-shooting.

RHC makes no Warranty with respect to batteries, instruments, avionics or other trade accessories since they are usually warranted separately by their respective manufacturers. New aircraft are equipped with new engines which have a separate Lycoming limited warranty.

ADDITIONAL WARRANTY FOR MAIN & TAIL GEARBOXES

In addition to the warranty specified above, an extended pro-rated warranty shall apply to the main and tail gearboxes for the first 2200 hours of service or three years from the date of manufacture, whichever event occurs first. During this period, if a gearbox must be overhauled due to failure of a part which was defective when it left the factory, RHC will pro-rate the cost of the overhaul by dividing the hours in service by 2200 or the months in service by thirty-six (36), whichever fraction is greater.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IS GIVEN AND ACCEPTED IN LIEU OF ANY AND ALL OTHER WARRANTIES AND REPRESENTATIONS, EXPRESS, IMPLIED, OR STATUTORY, WHETHER WRITTEN OR ORAL, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR TRADE USAGE, THE REMEDIES OF THE BUYER SHALL BE LIMITED TO THOSE PROVIDED HEREIN. IN NO EVENT WILL THE MANUFACTURER BE LIABLE FOR LOSSES RESULTING FROM LOSS OF USE OF THE HELICOPTER, COLLATERAL, CONSEQUENTIAL OR SPECIAL DAMAGES, OR ANY OTHER COSTS.

Warranty adjustments with respect to any helicopter or parts manufactured by RHC will be made only upon compliance with the following procedure:

- (1) The defective part or assembly, together with a written Warranty Claim, must be returned to RHC not later than thirty (30) days after discovery of the defect nor more than thirty (30) days after expiration of the Warranty period.*
- (2) RHC will, after inspection, determine whether the material or part was defective when it left the factory and will respond accordingly. Final determination of a Warranty adjustment rests with RHC.*

ROBINSON HELICOPTER COMPANY, INC.
2901 Airport Drive
Torrance, California 90505 U.S.A.

Effective 1 February 2003

LIMITED PARTS WARRANTY

Robinson Helicopter Company, Inc. (hereafter referred to as RHC) warrants each new helicopter part to be free from defects in material and workmanship appearing within one year from the date of delivery from the RHC factory or during the first one thousand (1000) hours of operation, whichever event occurs first; provided, the part has been subjected to normal use and service. This Warranty is limited to repair or replacement on an exchange basis, as selected by RHC, of any part, which upon examination by RHC is deemed to have been defective when the part left the factory. A new warranty period is not established for parts replaced under the terms of this Warranty. Such replacement parts are warranted only for the remainder of the original warranty period. RHC is not responsible for the cost of removing, shipping, or re-installation of parts under the terms of this Warranty. This Warranty shall not apply to any part which has been repaired or altered outside the factory, and which, in RHC's judgment, has affected the performance or reliability of the part. This Warranty shall not apply to any part which has been subject to corrosion, misuse, negligence or accident, nor to any parts normally replaced during routine maintenance, such as, air cleaners, skid shoes, rod end or spherical bearings, light bulbs, etc.

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**ROBINSON HELICOPTER COMPANY, INC.
2901 Airport Drive
Torrance, California 90505 U.S.A.**

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