

United States of America
 Department of Transportation—Federal Aviation Administration
Supplemental Type Certificate

Number SR00409SE

This certificate, issued to

Certified Technology
 3080 Thorntree Dr. #125
 Chico, CA 95973

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 27 of the Federal Aviation Regulations.

Original Product—Type Certificate Number:

H3WE

Make:

McDonnell Douglas Helicopter Co. (Hughes)

Model:

369A, 369H, 369D, 369E, 369FF, 500N, and 600N

Description of the Type Design Change: Rapid removal door system hinges, installed in accordance with Certified Technology Installation Instructions CT9602-1, Revision C, dated January 1, 2000, or later FAA approved revision and manufactured in accordance with Certified Technology Drawing List CT9602, Revision E, dated January 10, 2000, or later FAA approved revision.

Limitations and Conditions: Approval of this change in type design applies to the above model aircraft only. This approval should not be extended to other aircraft of these models on which other previously approved modifications are incorporated unless it is determined by the installer that the relationship between this change and any of those other previously approved modifications, including changes in type design, will introduce no adverse effect upon the airworthiness of that aircraft. A copy of this Certificate must be maintained as part of the permanent records for the modified aircraft.

A copy of this Certificate and FAA approved RFMS must be maintained as part of the permanent records of the modified rotorcraft.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: February 19, 1996

Date issued:

Date of issuance: January 29, 1997

Date amended: July 28, 1997; October 30, 2000



By direction of the Administrator

(Signature)

Acting Manager, Seattle Aircraft
 Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

**INSTALLATION INSTRUCTIONS
MDHC 500/600 RAPID REMOVAL DOOR SYSTEM**

**SECTION III
500/600 ENGINE COWL DOORS**

3.1.00 GENERAL INFORMATION

The Rapid Removal Pins for the Engine Cowl doors are designed to be direct replacements for the bolts, nuts, washers and spacer used in the original factory installation.

The installation of these new door hinge pins should be accomplished in accordance with standard aviation practices.

NOTE: The wires that are used to prevent loss of the quick release pins and safety pins may be removed if they create an interference problem with the doors. Although this is an allowed option it is not advisable due to the potential loss of the required safety pins.

WARNING – DO NOT DISCARD THE SAFETY PINS AT THE BOTTOM OF THE QUICK RELEASE PINS. THESE SAFETY PINS ARE A REQUIRED PART OF THIS STC UNDER THE FEDERAL AVIATION REGULATIONS.

3.2.00 HINGE PREPERATION

3.2.10 Only perform the following operation on one hinge at a time.

3.2.11 Remove the bolt, washers, nut and spacer from one hinge.

CAUTION: Use care when removing the original hardware to ensure that the doors remain latched and secured to the aircraft. Remove and replace only one bolt at a time.

3.2.13 Use a ¼ (.250) drill to upsize the hole in the bottom lug of the airframe portion of the hinge as noted on page 2 of drawing 9602104.

3.2.14 Carefully run a 9/32 (.28125) ream through both lugs of the airframe hinge and the tongue of the door hinge. Use a light lubricant such as WD 40 while reaming. Use a moderately slow rpm and make one pass through and back out.

CAUTION Do not make multiple passes with the ream. This will excessively enlarge the holes and cause a loose fit for the bushing.

3.2.15 Remove the cowl door from the aircraft. Use **CAUTION** as the door will tend to twist with only one bolt installed.

INSTALLATION INSTRUCTIONS
MDHC 500/600 RAPID REMOVAL DOOR SYSTEM

3.2.16 Clean and debur the holes that have been reamed.

3.3.00 BUSHING INSTALLATION

3.3.10 The bushings are positioned as shown in drawing 9602104 page 2.

3.3.11 Install the bushing in the lower lug of the airframe hinge first. This will allow the bushing to be pressed in with a rod through the hole in the top lug.

3.3.12 Apply an even coating of Loctite 609 to the hole in the lug using a cotton swab.

3.3.13 Place the bushing in position and while supporting the bottom of the lug, press the bushing into place. **CAUTION:** Do not pound against the lugs of the hinge as this can stress and crack them. The bushings should not take more than a light amount of pressure to install.

3.3.14 Ensure that the bushing is fully seated.

3.3.15 Install the remaining bushings as shown in drawing 9602104 page 2.

3.3.16 Allow the Loctite to harden. Reinstall the door on the aircraft.

3.3.17 Using a 3/16 (.1875) drill, make one pass through the 3 bushings that make up the hinge. This will align the bushing bores for easy operation of the quick release pin. Insert the quick release pin in the bushed hinge.

3.3.18 Remove the remaining hinge bolt, nut, washer and spacer. Repeat steps 3.2.11 thru 3.3.17.

3.3.19 After both hinges of one door have been upgraded remove one of the bolts securing the door hinge half for each hinge. Place the tab washer for the retaining wires of the new quick release pin and safety pin under the bolt and reinstall. Use whichever bolt allows for ease of operation of the safety pin and quick release pin.

3.3.20 This completes the installation for one door. Repeat the above operations for the other door.

3.4.00 WEIGHT AND BALANCE

3.4.10 There is no change to the weight and balance.