

**HUGHES
SERVICE INFORMATION
LETTER**

LETTER NO. HL-55

DATE 14 February 1978

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TO—All owners and operators of Hughes Helicopters

**SUBJECT: UTILIZATION OF ENGINE AIR PARTICLE SEPARATOR AND
ENGINE COMPRESSOR WATER WASH KITS**

MODELS AFFECTED: All 500 Model 369H, 369HS, 369HM and 369HE Helicopters

Reference

500 Series - Basic HMI Issued 1 Oct 1972; Revision No. 7, 15 Dec 1976

500 Series - HMI Appendix A, Issued 1 Apr 1976; Revision No. 1, 1 Aug 1976

FAA Approved Rotorcraft Flight Manual for applicable 369H, 369HS, 369HM or
369HE Helicopter

Supplement to Approved Rotorcraft Flight Manual, Engine Air Particle
Separator Kit, PN 369H90148 and 369H90148-501

Hughes Service Information Notice No. HN-107.1, dated 23 Jan 1978

Detroit Diesel Allison Commercial Service Letter 250-C18 CSL-69; 250-C20
CSL-1020

The PN 369A90148 Basic and -501 engine air particle separator kit is available as optional equipment to filter and scavenge the engine intake air of contaminants (dirt, dust, debris, etc) which can be detrimental to the operation and life of the helicopter engine.

Field reports indicate that on helicopters equipped with the particle separator, some pilots are not turning on the SCAV-AIR switch to obtain maximum filtration. This switch should be turned off during engine start up, and on during take off and landing. Based on atmospheric conditions at cruise altitudes over 500 feet, the particle separator may be deactivated at the discretion of the pilot, by turning off the SCAV-AIR switch during cruise flight. The loss in power at TOT limiting conditions is approximately 5 horsepower or 33 pounds in hover performance.

Operating procedures and performance data for helicopters equipped with the particle separator are provided in the above referenced Supplement to the Rotorcraft Flight Manual.

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When the helicopter is used for agricultural spraying, or operated in an atmosphere containing corrosive chemicals or salt water air, smoke, fumes, etc, it is recommended that owners and operators perform a daily water wash of the engine to clean corrosive deposits from the compressor blades. A PN 369H92537 engine compressor water wash kit is available for this purpose. Initial installation instructions are provided in Hughes Notice No. HN-107.1. Wash procedures, flow requirements, etc. are provided in the referenced DDA Commercial Service Letter CSL-69; CSL-1020.

Installation and proper use of the engine air particle separator and engine compressor water wash kits will help ensure optimum performance and improve service life of the engine.

A handwritten signature in cursive script that reads 'Edward Koch'.

Edward Koch, Manager
Customer Service Department
Hughes Helicopters