

FOR TRAINING USE ONLY



HUGHES  
SERVICE INFORMATION  
LETTER

LETTER NO. L-47

DATE July 16, 1968

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TO—All owners and operators of Hughes Helicopters

SUBJECT: INTERIM REVISION(HMI) RE: WEAR TOLERANCES -  
P/N 269A5618 OUTPUT SHAFT, TAIL ROTOR TRANS-  
MISSION

MODELS AFFECTED: All helicopters equipped with P/N 269A5650 Tail Rotor  
Drive Transmission Assembly

Reference

269A/A-1/TH-55A Handbook of Maintenance Instruction, Revised 1 June 1968  
269B Handbook of Maintenance Instruction, Reissued 1 April 1968

The information given in this Service Information Letter defines inspection pro-  
cedures and wear tolerances for the P/N 269A5618 Tail Rotor Transmission  
Output Shaft including the spline teeth inboard of the split ring groove. This  
data supplements applicable data in the current HMI's, and is to be considered  
a part of the HMI until formal incorporation is accomplished at the next revision  
cycle.

269A/A-1/TH-55A HANDBOOK OF MAINTENANCE INSTRUCTION  
269B HANDBOOK OF MAINTENANCE INSTRUCTION

Page 5-20, Para. 5-23. TOOLS AND EQUIPMENT

ADD: Micrometer - point, 2 inch	Commercial
Wire, measuring-0.0960 inch diameter; or blank, drill or drill shank-#41(0.0960 inch)	Commercial

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Page 5-26, Para. 5-28. CLEANING AND INSPECTION - TAIL ROTOR  
TRANSMISSION

ADD: New step g. as follows:

g. Inspect output shaft and spline teeth for excessive wear as follows:

(1) Insert two 0.0960 inch diameter measuring wires nearly opposite each other in tooth spaces between teeth of the swashplate driving spline inboard of the split ring groove, as shown in Figure 1.

NOTE

Output shaft has odd number (17) of splines; therefore wires will not be spaced  $180^{\circ}$  apart.

(2) Position micrometer over two wires to obtain measurement; repeat through full circumference of spline.

CAUTION

Tooth wear shall be acceptable when dimensions are 0.9780 inches or above. If any measurement is below the 0.9780 minimum dimension, remove the output shaft from service.

(3) Using micrometer, measure diameter of pinion shaft; pay particular attention to oil seal contact area on shaft.

NOTE

Wear induced by the oil seal on output shaft shall be acceptable to 0.9060 inch diameter, providing no oil leakage is observed. If wear induced by the oil seal on the shaft is in excess of the 0.9060 minimum dimension, or generates oil leaks, relocate the position of the seal lip on the shaft by inserting an additional gasket (20) under the seal retaining cap. (Refer to following paragraph, ASSEMBLY-TAIL ROTOR TRANSMISSION, Step c.)

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Page 5-26, Para. 5-29. ASSEMBLY - TAIL ROTOR TRANSMISSION

ADD: Note to existing step c. as follows:

NOTE

Install additional gasket (20), if required, to reseal lip of oil seal on output shaft. (Refer to preceding paragraph, CLEANING AND INSPECTION-TAIL ROTOR TRANSMISSION, step g.)

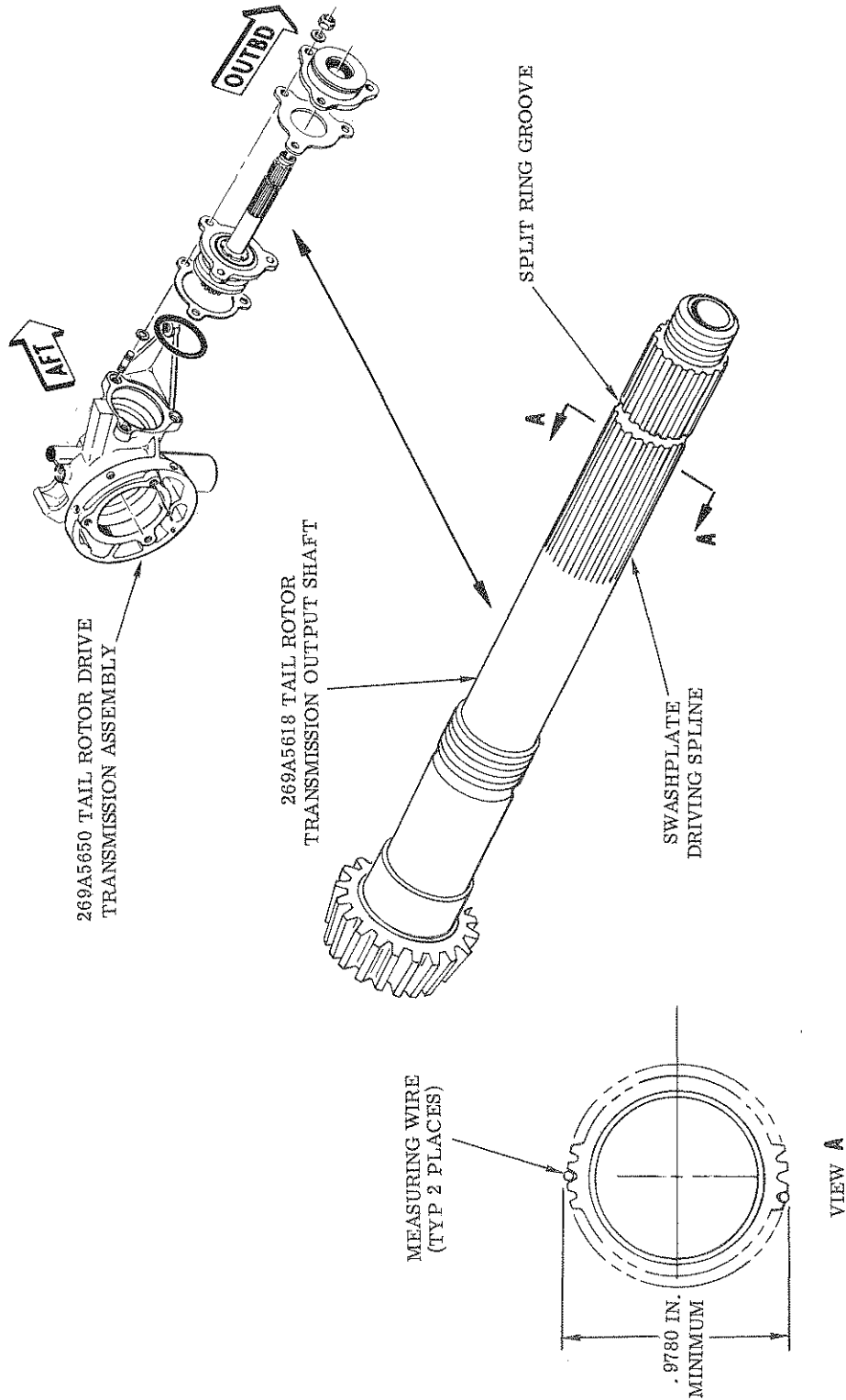


FIGURE 1. WEAR TOLERANCE- OUTPUT SHAFT, TAIL ROTOR TRANSMISSION