HUGHES SERVICE INFORMATION NOTICE

NOTICE NO. N-66
DATE Dec. 10, 1968

SUBJECT: BALANCE WEIGHT INSTALLATION - P/N 269B1145 SERIES MAIN ROTOR BLADES

MODELS AFFECTED:

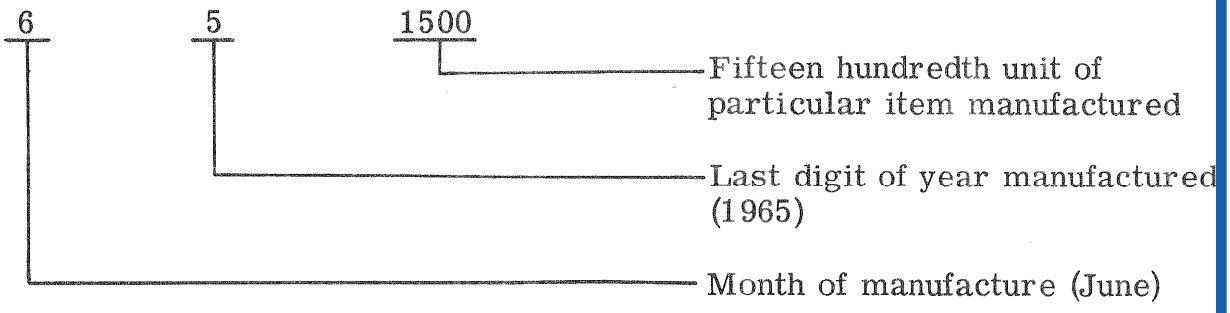
1. All 269 Series Helicopters equipped with P/N 269B1145 Main Rotor Blades Serial No. 65-1500 and subsequent.
2. All 269 Series Helicopters equipped with P/N 269B1145-1 Main Rotor Blades all serial numbers.

TIME OF COMPLIANCE: At owners and operators discretion.

PREFACE:

The information given in this Service Information Notice lists a procedure for installing a balance weight assembly on the main rotor blade tip to minimize or eliminate vibration caused by an out-of-balance condition within the main rotor system.

It is noted that each main rotor blade is identified by a Serial Number consisting of six or seven digits. The first two or three digits indicate the date of blade manufacture. The last four digits, as noted below, define the sequence of blade manufacture and are generally used for identification purposes.



FORM NO. 9578A HTC AD REV 11-67

Reference

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

PARTS LIST

When ordering, specify kit Part No. 269A1107, which includes the following:

Nomenclature	Part No.	Qty.	Mfgr.
Balance Weight	269A1106-3	A/R	HTC-AD
Balance Weight	269A1106-5	A/R	HTC-AD
Screw	AN503-10-8	2	Commercial
Screw	AN503-10-10	A/R	Commercial
Washer	AN960-10	A/R	Commercial
Lockwire	MS20995F41 or MS20995N-32	A/R	Commercial

PROCEDURE

a. Perform rigging procedure for helicopter flight controls. (Refer to Section VI of HMI)

NOTE

If vibration exists after tracking main rotor blades; perform the following; otherwise no further action is required.

b. Perform troubleshooting procedure for vibration of main rotor blades. (See Table 4-1 in HMI for probable causes and corrective action).

NOTE

If vibration is due to out-of-balance condition of main rotor system, perform the following:

c. Remove two nylon set screws installed in tip weight of one of the main rotor blades; install 1106-3 balance weight using AN503-10-8 screws (10 grams total weight).

d. Test fly helicopter and proceed as follows:

1. If vibration is eliminated or reduced to an acceptable level, lockwire screws; no further action required.

2. If vibration is reduced but still not acceptable, add or subtract from blade until vibration is eliminated or reduced to an acceptable level; lockwire screws; no further action required.

NOTE

(a) AN960-10 washers may be used in place of balance weights (See Weight Table, Figure 1); not to exceed five (5) washers on any one screw.

(b) Screws, weights or washers shall be equally distributed at each screw attach point to maintain blade chordwise balance.

(c) Total weight added to any one blade shall not exceed 30 grams.

(d) AN503-10-1 screws shall be used when total thickness of weights collectively exceeds 0.260 inch.

CAUTION

Damage to tracking flag and possible damage to blades can result if blade weights are not removed when performing main rotor blade tracking operation.

3. If vibration level is increased or not changed, remove balance weight from blade; repeat step c. for each of the remaining blades or, if necessary, two blades simultaneously. Reinstall nylon screws where necessary.

NOTE

If vibration cannot be reduced to an acceptable level after balance weight adjustments on main rotor blades, contact Service Manager HTC-AD for further assistance in determining cause of out-of-balance condition in main rotor system.

WEIGHT DATA		
PART NO.	NAME	WEIGHT(REF)
269A1106-3	BALANCE WEIGHT	4.0 GRAMS
269A1106-5	BALANCE WEIGHT	10.0 GRAMS
AN503-10-8	SCREW	3.0 GRAMS
AN503-10-10	SCREW	3.4 GRAMS
AN960-10	WASHER	0.9 GRAMS
MS20995F41	LOCKWIRE	0.18 GRAMS PER INCH

Figure 1. Balance Weight Installation