



March 23rd, 2009

TO: All Owners/Operators of Bell 212 Helicopters

SUBJECT: REVISION "C" TO TECHNICAL BULLETIN 212-81-48: PT6T-3/B/BE/BF/BG POWER SECTIONS, MIXING AND USE OF.

Revision "C" to this bulletin adds Technical Bulletin 212-81-54 as a reference for replacing the Hose Assy as mentioned in the Accomplishment Instructions. It also corrects Table 1 and clarifies the description to reflect authorized configurations of powerplant.

TECHNICAL BULLETIN
Bell Helicopter

A Textron Company

No. 212-81-48

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REV C

MODEL AFFECTED: 212

SUBJECT: PT6T-3/B/BE/BF/BG POWER SECTIONS, MIXING AND USE OF.

HELICOPTERS AFFECTED: All Model 212 Helicopters

COMPLIANCE: At customer's option

DESCRIPTION:

Various engine power section models were introduced as upgrades for the original PT6T-3 power sections. Operators of different generations of model 212/412 helicopters may wish, for the sake of logistics convenience, to only stock spare power sections of later-generation. This technical bulletin authorizes the replacement of earlier-generation power sections with later-generation power sections according to Table 1. When power sections are mixed in such manner, both power sections must be operated at the lower performance/power levels of the original power section(s) and their respective TBO still applies. When replacing PT6T-3 power section(s) with other model power section(s), the fuel control drain hose(s) must be replaced. Installation of PT6T-3BE, PT6T-3BF and PT6T-3BG power sections is not approved on model 212 helicopters except when installed per this bulletin and operated as a PT6T-3 or PT6T-3B.

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APPROVAL:

The engineering design aspects of this bulletin are FAA/DER approved.

MANPOWER:

No additional man-hours are required to complete this bulletin if accomplished as a normal power section removal and replacement.

WARRANTY:

There is no warranty provided for this bulletin.

MATERIAL:

Required Material:

The following material is required only for the replacement of PT6T-3 power section with any other generation power section and may be obtained through your Bell Helicopter Textron Supply Center (refer to Table 1).

<u>Part Number</u>	<u>Nomenclature</u>	<u>Quantity</u>
70-009F000X253A	Hose Assembly (LH side)	1
70-009F000Y287A	Hose Assembly (RH side)	1

SPECIAL TOOLS:

None required

WEIGHT AND BALANCE:

When replacing a PT6T-3 power section with any other generation power section, the following corrections should be made to the weight and balance records (see Table 1).

<u>Change</u>	<u>Weight</u>	<u>Longitudinal arm (in.)</u>	<u>Longitudinal moment (in-lbs.)</u>	<u>Lateral arm (in.)</u>	<u>Lateral moment (in-lbs.)</u>
-3 to -3B/BE/BF/BG left side	+ 6.0	189.0	+ 1134	- 12.0	- 72
-3 to -3B/BE/BF/BG right side	+ 6.0	189.0	+ 1134	+ 12.0	+ 72

ELECTRICAL LOAD DATA:

Not affected

REFERENCES:

BHT-212-MM Maintenance Manual, Chapter 71
BHT-212-IPB Illustrated Parts Breakdown, Chapter 71
3017042 P&WC Maintenance Manual for PT6T-3 thru PT6T-3BG

P&WC Service Bulletins 5002, 5003, 5121, 5424 & 5425
TB 212-81-54 PT6T-3B Engine, Installation of.

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PUBLICATIONS AFFECTED:

None

ACCOMPLISHMENT INSTRUCTIONS:

1. Remove and replace one or both power section(s), as required, with later generation power section(s) as per Table 1. The replacement must be accomplished in accordance with the BHT 212 Maintenance Manual and P&WC Maintenance Manual for PT6T-3 thru PT6T-3BG engines. No instrument change or marking is required nor authorized. Replacement power sections must be operated under the lower performance/power levels of the original power sections in accordance with existing applicable Flight Manual. Airworthiness limitations of the replacement power sections remain unchanged (refer to the latest revision of P&WC Service Bulletin 5002 and 5003).

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For example, if a PT6T-3BG power section is installed as replacement for a PT6T-3 power section, it must be operated as a PT6T-3 and maintained as a PT6T-3BG power section.

2. If required, replace fuel control drain hose(s) in accordance with TB 212-81-54 (see Table 1).

-Note-

Due to a change in design, certain gearboxes cannot be used with the PT6T-3B (or later) power sections. Refer to P&WC Service Bulletin 5121 to differentiate between acceptable and non-acceptable gearboxes.

Original power section	Possible replacement power section(s)	W&B & hose change req'd
PT6T-3	PT6T-3B, PT6T-3BE, PT6T-3BF, PT6T-3BG	Yes
PT6T-3B	PT6T-3BE, PT6T-3BF, PT6T-3BG	No

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Table 1