

TECHNICAL BULLETIN
Bell Helicopter **TEXTRON**

A Subsidiary of Textron Inc.

No. 212-04-195

Date Feb 16-04

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DATE
REV

MODEL AFFECTED: 212

SUBJECT: OIL DRAIN VALVE P/N 209-062-010-001,
POWERPLANT ACCESSORY GEARBOX,
IMPROVED SECURITY OF SCREWS.

HELICOPTERS AFFECTED: Model 212 helicopters serial number 30500
through 31311 and 35001 through 35103.

COMPLIANCE: At Customer's Option, however it is
recommended to inspect and modify (as
applicable) the valves at the next scheduled
inspection.

DESCRIPTION:

**Subject drain valve installed on model 212 or sold as spare has been
manufactured using wire-locked screws or self-locking screws under
the same part number.**

**This bulletin gives a replacement procedure for the self-locking
screws, using wire-locked screws to ensure that no damage is
induced to the cup-washer sealing the rotating shaft of the affected
valve.**

APPROVAL:

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

MANPOWER:

Approximately 0.5 man-hour is required to accomplish Part I of this bulletin. Approximately 3.0 man-hours are required to accomplish Part II of this bulletin. Man-hours are based on hands-on time, and may vary with personnel and facilities available.

MATERIALS:

Required Material:

The following material is required for the accomplishment of Part II of this bulletin and may be obtained through your Bell Helicopter Textron Supply Center.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Quantity</u>
MS35275-213	Wire-locked screw	20 (see Note 1)
M25988/1-115	Packing	2
NAS617-8 (Alt: M83248/1-908)	Packing	(see Note 2)
NAS617-4 (Alt: M83248/1-904)	Packing	(see Note 2)

Notes:

1. A quantity of 10 screws is required for each valve.
2. A total quantity of fourteen (14) NAS617-8 packings will be required for all 212 manufactured prior to serial number 35043. A quantity of eight (8) NAS617-8 packings and four (4) NAS617-4 packings will be required for ship S/N 35043 through S/N 35103.

Consumable Material:

The following material is required to accomplish this bulletin, however this material is considered consumable (bench stock) material and may not require ordering depending on the operators consumable material stock levels. This material may be obtained through your Bell Helicopter Textron Supply Center.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Quantity</u>	<u>Reference</u>
AS100026	Lockwire (0.020 inch/0.508 mm dia.)	A/R	C-508

SPECIAL TOOLS:

None required

WEIGHT AND BALANCE:

Not affected

ELECTRICAL LOAD DATA:

Not affected

REFERENCES:

BHT-212-IPC Illustrated Parts Breakdown
BHT-212-MM Maintenance Manual
BHT-ALL-SPM Standard Practices Manual

PUBLICATIONS AFFECTED:

None affected

ACCOMPLISHMENT INSTRUCTIONS:

Part I: Verification for affected valve

1. Get access to the front of number 1 and number 2 powerplant accessory gearboxes and verify if the oil drain valve 209-062-010-001 has screws without lockwire.
 - a) If one or both valves are observed with screws without lockwire, accomplish Part II of this bulletin before returning the aircraft to service.
 - b) If both valves have screws secured with lockwire, the valves can remain in service. Annotate aircraft technical records that this bulletin is completed before returning the aircraft to service.

Part II: Replacement of self-locking screws by wire-locked screw.

1. Refer to the maintenance manual and drain oil from affected powerplant accessory gearbox.
2. Disconnect applicable rigid lines, reducers and fittings to get access to the affected valve. Cap each line, reducers and fittings. Discard used packings.
3. Loosen the jamnut securing the affected valve to the powerplant gearbox and remove valve from the engine compartment area.

CAUTION

BHT recommends replacing only one screw at a time, especially on the flange where the rotating knob is located to prevent inducing damage to cup-washer sealing the rotating shaft.

-NOTE-

BHT recommends using a calibrated dial-type torque wrench during accomplishment of the following step.

4. Replace the self-locking screws MS21090-0100, one at a time, by wire-locked screws MS35275-213. Torque each screw to 5.0 +/- 1.0 inch/lbs (0.56 +/- 0.11 Nm).
5. Safety the screws in pair using 0.020 inch (0.508 mm) diameter lockwire.
6. Install each valve with new packing in front of each powerplant gearbox. Make sure that the packing is well positioned before you torque the jamnut.
7. Remove protective caps from fittings and reducers and install back in place, using new packings. Connect all applicable drain lines.
8. Make sure that the affected valve rotating knob is in the closed position and service the powerplant accessory gearbox as required with appropriate oil.
9. Run the aircraft and verify that no leak exists.

10. Annotate the aircraft technical records to indicate that this bulletin is completed before the aircraft is returned to service.