



A Textron Company

ALERT SERVICE BULLETIN

505-22-29

PSL #1161

20 December 2022

MODEL AFFECTED: 505

SUBJECT: ENGINE FUEL DRAIN TUBE AND COMPRESSOR WASH TUBE CLAMPING, INTRODUCTION OF.

HELICOPTERS AFFECTED: Serial numbers 65011 through 65439.

[Serial number 65440 and subsequent will have the intent of this bulletin accomplished prior to delivery.]

COMPLIANCE: **PART I** - Within 50 flight hours or 30 days, whichever occurs first, following the release date of this bulletin.

PART II – As required by **PART I**, or within 300 flight hours or 12 months, whichever occurs first, following the release date of this bulletin.

DESCRIPTION:

Bell has received field reports of chafing between the engine fuel drain tube and the engine compressor wash tube. This Alert Service Bulletin (ASB) requires operators to carry out a one-time visual inspection on these lines and replace any damaged parts as necessary. It also introduces the addition of clamps and associated hardware to improve the clearance between these tube assemblies.

Applicability of this bulletin to any spare part shall be determined prior to its installation on an affected helicopter.

APPROVAL:

The engineering design aspects of this bulletin are Transport Canada Civil Aviation (TCCA) approved.

CONTACT INFO:

For any questions regarding this bulletin, please contact:

Bell Product Support Engineering
Tel: 1-450-437-2862 / 1-800-363-8023 / productsupport@bellflight.com

MANPOWER:

Approximately 1.5 man-hours are required to complete this bulletin. This estimate is based on hands-on time and may vary with personnel and facilities available.

WARRANTY:

Owners / Operators of Bell Helicopters who comply with the instructions in this bulletin will be eligible to receive non prorated replacement parts as applicable, which are listed in the MATERIAL section of this bulletin. The www.mybell.com portal allocates specific warranty entitlement for an aircraft by serial number. The Product Service Letter (PSL) number is listed below the bulletin number on the introduction page. This is going to be a required field when submitting a claim on the Bulletins Tab for replacement parts, labor, and/or freight. If you receive an ASB or TB that does not have a PSL number, then there is no warranty entitlement for that bulletin.

Labor entitlement: Yes, \$142.50 USD

To receive parts and labor under warranty:

- Comply with the instructions contained in this Bulletin no later than the applicable date in the “compliance section”.
- If there is a PSL number identified in the bulletin, you will be required to enter this PSL number which will validate warranty entitlement for the selected aircraft. Please ensure that you use the Bulletin Tab on the warranty section on www.mybell.com portal to file your claim.

MATERIAL:

Required Material:

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

<u>Part Number</u>	<u>Nomenclature</u>	<u>Qty (Note)</u>
FT29906	FUEL DRAIN TUBE	1 (1)
CA-505-22-29	KIT	1 (2)

NOTES:

1. Order replacement part only if damage beyond acceptable limits is found during inspection performed in **PART I**.
2. Kit CA-505-22-29 includes clamp MS21919WCH4 (1 each, alternate: AS21919WCH04Y), clamp MS21919WCH5 (1 each, alternate: AS21919WCH05Y), screw NAS1802-3-8 (1 each), washer NAS1149C0332R (2 each) and nut NAS9926-3L (1 each).

Consumable Material:

The following material is required to accomplish this bulletin, but may not require ordering, depending on the operator's consumable material stock levels. This material may be obtained through your Bell Supply Center.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Qty (Note)</u>	<u>Reference *</u>
COMMERCIAL	CAPS OR PLUGS	A/R (1,2)	C-428

* C-XXX numbers refer to the consumables list in the BHT-ALL-SPM, Standard Practices Manual

NOTES:

1. A/R stands for as required.
2. Caps or plugs are required only if the engine fuel drain tube needs to be removed.

SPECIAL TOOLS:

None required.

WEIGHT AND BALANCE:

Not affected.

ELECTRICAL LOAD DATA:

Not affected.

REFERENCES:

BHT-505-MM Maintenance Manual, Chapter 71.

PUBLICATIONS AFFECTED:

BHT-505-IPC Illustrated Parts Catalogue, Chapter 71.
BHT-505-MM Maintenance Manual, Chapter 71.

ACCOMPLISHMENT INSTRUCTIONS:

PART I – One-time inspection.

1. Prepare the helicopter for maintenance.
2. Remove the aft engine cowling (443AT) ([DMC-505-A-71-10-02-00A-520A-A](#)).

-NOTE-

Make sure there is a minimum clearance of 0.010 inch (0.254 mm) between the fuel drain tube (1, Figure 1) and the compressor wash tube (2). Loosening and tightening of the tube end fittings for repositioning of the tubes may be required.

3. Visually inspect the clearance between the fuel drain tube (1, Figure 1) and the engine compressor wash tube (2). If the tubes are contacting each other, or if there is evidence of chafing damage on either tube, go to step 4, otherwise go to step 7.
4. Remove the fuel drain tube (1) ([DMC-505-A-71-70-05-00A-520A-A](#)).

-NOTE-

For the damage limits of the engine compressor wash tube, refer to the Safran Helicopter Engines Arrius 2R Engine Maintenance Manual (X 319 R5 460).

5. If there is chaffing damage on the fuel drain tube (1), measure the depth.
 - a. If the damage depth is less than 0.010 inch (0.254 mm) the fuel drain tube (1) is considered serviceable and can remain in service. Go to step 6.
 - b. If the damage depth is more than 0.010 inch (0.254 mm), replace the fuel drain tube (1) with a serviceable fuel drain tube meeting the intent of the bulletin.

-NOTE-

Make sure a minimum clearance of 0.010 inch (0.254 mm) can be obtained between the fuel drain tube (1) and the compressor wash tube (2). Loosening and tightening of the tube end fittings for repositioning of the tubes may be required.

-NOTE-

If 0.010 inch (0.254 mm) clearance cannot be achieved, perform **PART II** prior to next flight.

6. Install serviceable fuel drain tube (1) ([DMC-505-A-71-70-05-00A-720A-A](#)).
7. Install the aft engine cowling (443T) ([DMC-505-A-71-10-02-00A-720A-A](#)).
8. Make an entry in the helicopter logbook and historical service records indicating compliance with **PART I** of this Alert Service Bulletin.

PART II – Installation of clamps.

1. Prepare the helicopter for maintenance.
2. Remove the aft engine cowling (443AT) ([DMC-505-A-71-10-02-00A-520A-A](#)).

-NOTE-

Position of the clamps should be adjusted to achieve a minimum 0.159 inch (4.0mm) clearance between the fuel drain tube (1) and the compressor wash tube (2). Loosening and tightening of the tube end fittings for repositioning of the tubes may be required.

3. Install the clamps (4 and 5, Figure 1) with screw (6), washers (7) and nut (8). Torque the nut (8) 30 to 40 inch-pounds (3.4 to 4.5 Nm).
4. Install the aft engine cowling (443T) ([DMC-505-A-71-10-02-00A-720A-A](#)).
5. Make an entry in the helicopter logbook and historical service records indicating compliance with **PART II** of this Alert Service Bulletin.

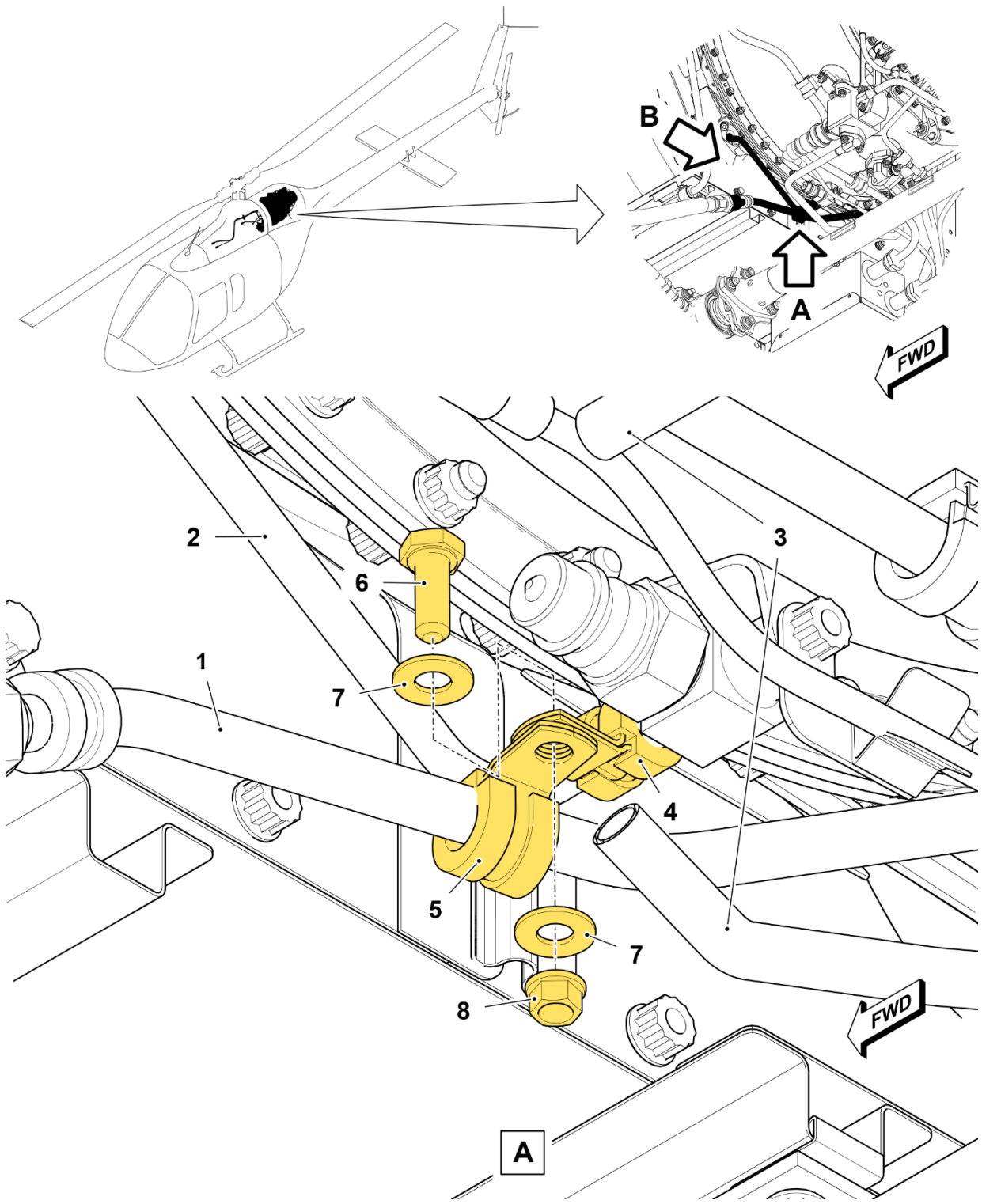


Figure 1 – Installation of clamps (sheet 1 of 2)

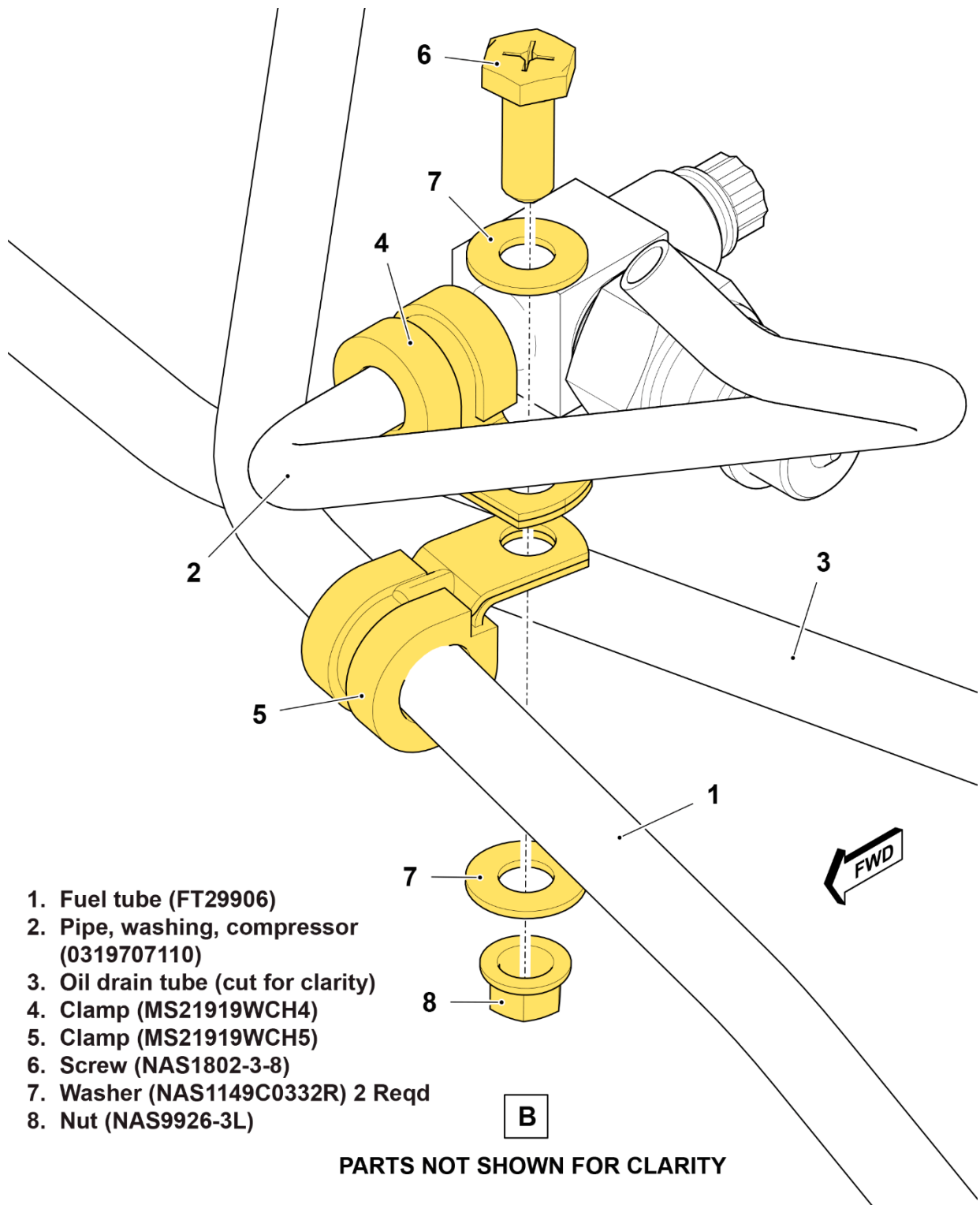


Figure 1 – Installation of clamps (sheet 2 of 2)