



DIRECCION NACIONAL DE AERONAVEGABILIDAD (DNA)
DIRECCION CERTIFICACION AERONAUTICA (DCA)
REPUBLICA ARGENTINA

ADVERTENCIA 097/DCA

La presente ADVERTENCIA tiene por objeto dar a conocer una situación que puede resultar de interés para Talleres Aeronáuticos de Reparación, operadores y/o propietarios de aeronaves. Se emite a los efectos de informar y las recomendaciones no tiene carácter mandatorio.

Ciudad Autónoma de Buenos Aires, 24 de noviembre de 2008.

APLICABLE A: Helicópteros Robinson R44 II.

MOTIVO: Pérdidas de combustible a través de conexiones con insuficiente torque.

ANTECEDENTES: Esta Advertencia pone en conocimiento del público usuario el Continuing Airworthiness Notice (CAN) N° 28-005 del 06-Noviembre-2008, emitido por la Autoridad de Aviación Civil de Nueva Zelanda, relacionado con un reporte de pérdidas de combustible en la unión de la manguera de entrada de combustible (P/N B283-10) a la Unidad de Control de Combustible (Precision Airmotive P/N 2576630-4). Dicha pérdida fue atribuida a que la unión de la manguera estaba insuficientemente torquada.

Para mayor claridad, se adjunta la Figura 4-31F del IPC del helicóptero.

Se adjunta a esta Advertencia el CAN N° 28-005 (una página).

RECOMENDACION: Esta Dirección recomienda prestar atención al procedimiento de ajuste y a los valores de torque cuando se ajustan mangueras de combustible. En la próxima inspección, remover el Sleeve (protección) P/N D735-1 que protege la unión T (P/N 6600-04-04-04SS) a la FCU y chequear el torque de los nipples (Precision Airmotive P/N 2577202) y las uniones tanto en las mangueras de entrada como en las de retorno de combustible de la FCU, de acuerdo con las consideraciones del párrafo "Recommendation" del CAN N° 28-005.

Para obtener mayor información dirigirse a la División Ingeniería de Mantenimiento de la DCA:

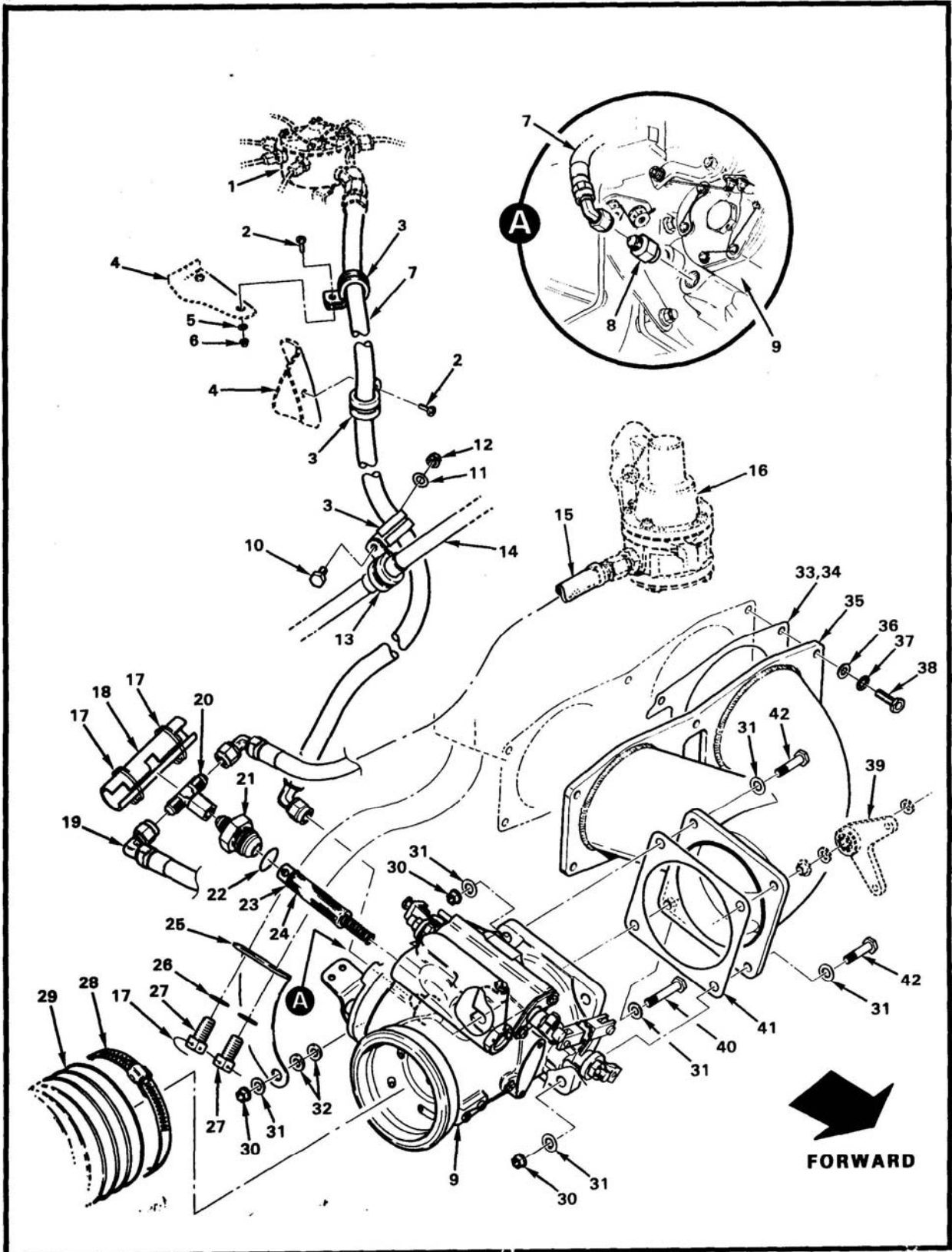
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4-31E

FIGURE 4-31F FUEL CONTROL INSTALLATION

Issued: JUL 2008

ROBINSON ILLUSTRATED PARTS CATALOG

MODEL R44

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	USABLE ON CODE	QTY PER ASSY
		FUEL CONTROL INSTALLATION*			
4-31F-1	63B23300**	Manifold Assembly - Fuel (Ref)			
	2576526-1***	Flow Divider (Ref)			
2	MS27039C0806	Screw	X		1
3	MS21919WDG9	Clamp (or MS21919WDG11 as required to fit)	X		2
4	D382-1	Cover Assembly (RH, Ref)			
5	NAS1149FN816P	Washer	X		1
6	MS21042L08	Nut	X		1
7	B283-7	Hose (outlet, to manifold)	X		1
8	2522710	Fitting - Outlet	X		1
9	2576630-4***	Fuel Control (Ref)			
10	AN3-3A	Bolt	X		1
11	NAS1149F0332P	Washer.	X		1
12	MS21042L3	Nut	X		1
13	NAS1715C8SW	Clamp	X		1
14	A723-15	Oil Line (Ref)			
15	B283-10	Hose (inlet, from engine-driven fuel pump)	X		1
16	-	Fuel Pump (engine-driven; Ref)			
17	MS20995C32	0.032 in. dia Safety Wire	X		A/R
18	D735-1	Sleeve	X		1
19	B283-11	Hose (fuel return, Ref; see Figure 4-31J)			
20	6600-04-04-04SS	Tee	X		1
21	2577202***	Fitting (Ref)			
22	951790***	O-Ring	X		1
23	951392***	O-Ring	X		1
24	-	Screen/Filter (Ref)			
25	D730-8	Brace	X		1
26	NAS1149F0632P	Washer	X		2
27	MS20074-06-05	Bolt	X		2
28	B277-56	Clamp (Ref, see Figure 4-31B)			
29	A785-31	Hose (Ref, see Figure 4-31B)			
30	MS21042L5	Nut	X		3
		*Ship S/N 10001 and higher. **Lycoming part no. ***Precision Airmotive part no.			
		(Cont'd)			

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X - Available as separate spares item
0 - Available only as part of assembly

4-31F

Continuing Airworthiness Notice – 28-005



Robinson R44 Hose Unions at Fuel Control

06 November 2008

Issued by the Civil Aviation Authority of New Zealand in the interests of aviation safety. A Continuing Airworthiness Notice (CAN) is intended to alert, educate, and make recommendations to the aviation community. A CAN contains non-regulatory information and guidance that does not meet the criteria for an Airworthiness Directive (AD). The inspections and practices described in this CAN must still be carried out in accordance with the applicable NZCAR Parts 21, 43 and 91.

The contents of this notice are ADVISORY ONLY and are NOT MANDATORY.

CAN numbering is by ATA Chapter followed by a sequential number for the next CAN in that ATA Chapter.

Applicability:

All Robinson R44 II aircraft fitted with a Lycoming IO-540 series engine.

Purpose:

This Continuing Airworthiness Notice (CAN) alerts operators of possible fuel leaks at the fuel control from fuel hose unions due to insufficient torque which could result in a catastrophic fire if leaking fuel comes into contact with a hot engine and exhaust components.

Background:

This CAN is prompted by a report of finding a significant fuel leak from the union of inlet fuel hose P/N B283-10 at the fuel control of a Lycoming IO-540 series engine fitted to a Robinson R44 II aircraft. The leaking fuel came into contact with parts of the hot engine and was discovered by the pilot after landing. The leak was attributed to the fuel inlet hose union being insufficiently torqued. The fuel inlet hose P/N B283-10 is connected to the Precision Airmotive fuel control P/N 2576630-4 at tee connector P/N 6600-04-04-04SS. The tee connector is covered by a heat wrap which must be removed to facilitate inspection of the hose unions.

Another R44 II aircraft was inspected during maintenance and the same inlet hose union was found to be insufficiently torqued.

Recommendation:

The CAA recommends that aircraft maintainers pay particular attention to the correct tightening procedures and torque value when tightening fuel hose unions. At the next scheduled maintenance inspection remove the heat wrap from the tee connector at the fuel control P/N 2576630-4 and check the tighten torque of the fuel fittings and unions of the fuel inlet hose P/N B283-10 and fuel return hose P/N B283-11.

AD action is not considered necessary at this time. Robinson Helicopter intends amending the R44 II maintenance instructions to specifically include an inspection of the fuel fittings at the fuel control unit.

Enquiries:

All other enquires regarding this CAN should be made to:

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