

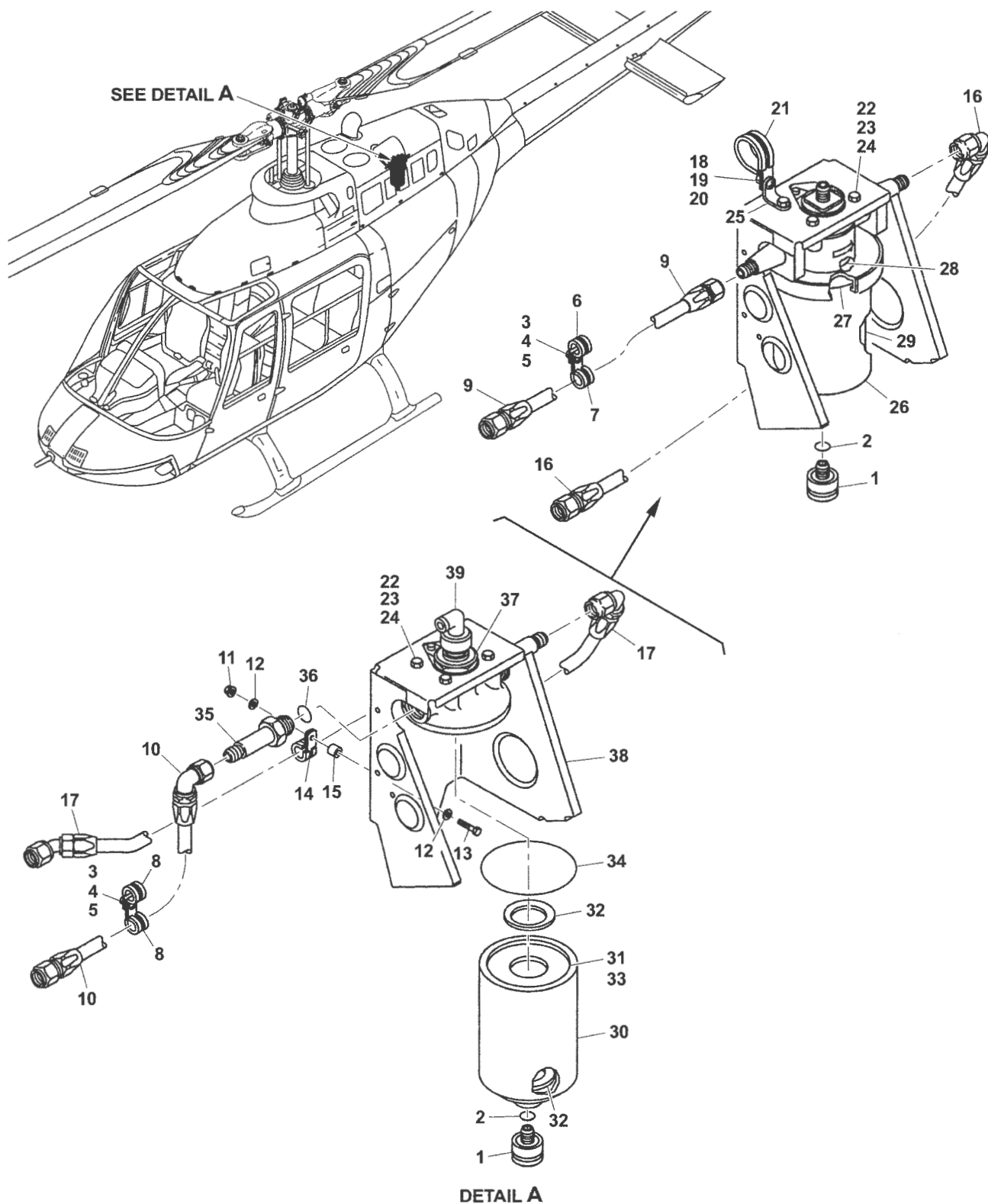


Figure 28-5. Fuel Filter Kit (S/N 4 Thru 3386) (Pre TB 206-81-55)

206AB_IPB_28_0007

(1)	(2)	(3)	(4)	(5)	(6)
INDEX NUMBER	PART NUMBER	ITEM NAME	UNIT PER ASSY	A V A I L	U O C
		Figure 28-5. Fuel Filter Kit (S/N 4 Thru 3386) (Pre TB 206-81-55) (Cont'd)			
21	MS21919DG20	. CLAMP (USBL ON 206-706-603-001) (REPLACED BY MS21919WDG20)	1	NP	
21	MS21919WDG20	. CLAMP (REPLACES MS21919DG20)	1	SP	
22	AN4H7A	. BOLT	3	SP	
23	AN960PD416	. WASHER, FLAT (REPLACED BY AN960JD416)	3	P	
23	AN960JD416	. WASHER, FLAT (REPLACES AN960PD416) (REPLACED BY NAS1149D0463J)	3	P	
23	NAS1149D0463J	. WASHER, FLAT (REPLACES AN960JD416)	3	SP	
24	NAS43DD4-31	. SPACER (REPLACED BY NAS43DD4-31N)	3	NP	
24	NAS43DD4-31N	. SPACER (REPLACES NAS43DD4-31)	3	SP	
25	20-032-2	. BRACKET, ANGLE (USBL ON 206-706-603-001)	1	SP	
26	52-2889-016	. FILTER ASSY, FUEL (MOD BY ASB 206-86-34) (REPLACED BY 52-2889-016A)	1		
26	52-2889-016A	. FILTER ASSY, FUEL (MOD BY ASB 206-86-34) (REPLACES 52-2889-016) (REPLACED BY 306001)	1	NP	
27	MS29513-153	. . PACKING, PREFORMED (USBL ON 52-2889-016, 52-2889-016A)	1	SP	
28	NAS1593-020	. . PACKING, PREFORMED (USBL ON 52-2889-016, 52-2889-016A) (REPLACED BY M83248/1-020)	2	NP	
28	M83248/1-020	. . PACKING, PREFORMED (REPLACES NAS1593-020) (REPLACED BY AS3209-020)	2	NP	
28	AS3209-020	. . PACKING, PREFORMED (REPLACES M83248/1-020)	2	SP	
29	52-01103-1	. . ELEMENT ASSY (USBL ON 52-2889-016, 52-2889-016A)	1	SP	
30	306001	. FILTER ASSY, FUEL (MOD BY ASB 206-86-34) (NOTE 2) (REPLACES 52-2889-016A) (REPLACED BY 222-366-621-001)	1	P	
30	222-366-621-001	. FILTER ASSY, FUEL (NOTE 2, 3) (REPLACES 306001) (REPLACED BY 222-366-621-003)	1	NP	
30	222-366-621-003	. FILTER ASSY, FUEL (MOD BY ASB 206-86-34) (REPLACES 222-366-621-001) (REPLACED BY 222-366-621-101)	1	NP	
30	222-366-621-101	. FILTER ASSY, FUEL (POST ASB 206-86-34) (REPLACES 222-366-621-003)	1	P	
		(ALTERNATE PART)			
30	222-366-621-103	. FILTER ASSY, FUEL	1	SP	
31	KD651510	. . FILTER PARTS KIT, FUEL (NOTE 3, 4) (REPLACED BY KD651511)	1	NP	
31	KD651511	. . KIT, ELEMENT, FUEL FILTER (NOTE 3, 5) (REPLACES KD651510)	1	NP	
		(ALTERNATE PART)			
31	1743645-03	. . KIT, FUEL FILTER, ELEMENT (NOTE 5)	1	SP	
32	306023	. . GASKET, FUEL FILTER (IL 206L-82-17) (NOTE 4) (USBL ON 306001) (REPLACED BY 222-366-644-001)	2	NP	
32	222-366-644-001	. . SEAL, FUEL FILTER (NOTE 5) (USBL ON 222-366-621-001, -003, -101 AND -103) (REPLACES 306023)	2	SP	
		(ALTERNATE PART)			
32	222-366-644-003	. . SEAL, FUEL FILTER (NOTE 5)	2	NP	
33	651500	. . ELEMENT, FUEL FILTER (IL 206L-82-17) (NOTE 4) (USBL ON 222-366-621-003, 306001)	1		
33	222-366-643-001	. . ELEMENT, FUEL FILTER (NOTE 5) (USBL ON 222-366-621-001, -003, -101 AND -103)	1	NP	
34	MS29513-238	. . PACKING, PREFORMED (IL 206L-82-17) (NOTE 4, 5) (USBL ON 222-366-621-001, -003, -101 AND -103, 306001)	1	SP	
35	306018	. . FITTING (USBL ON 306001)	2	NP	
35	222-366-652-005	. . FITTING (NOTE 2)	2	SP	
36	MS29512-12	. . PACKING, PREFORMED (NOTE 2)	2	SP	
37	M83248/1-123	. . PACKING, PREFORMED, SWITCH (REPLACED BY AS3209-123)	1	P	
37	AS3209-123	. . PACKING, PREFORMED, SWITCH (REPLACES M83248/1-123)	1	SP	
38	206-061-681-001	. BRACKET ASSY (USBL ON 206-706-603-001)	1	SP	
38	206-061-681-002	. BRACKET ASSY (USBL ON 206-706-603-003)	1	SP	

NOTE 5

FILTER ELEMENT KITS KD651511 AND 1743645-03 ARE COMPOSED OF ONE ELEMENT 222-366-643-001, TWO SEALS 222-366-644-001 OR -003, AND ONE PACKING MS29513-238.

28-49. FILTER ELEMENT CHANGE REQUIREMENT.

Airframe mounted fuel filter element shall change at same hourly interval as engine fuel filter (located in fuel pump housing) and after any indication of clogging not due to removable ice particles.

28-50. REMOVAL AND INSTALLATION — 206-706-603 FILTER ELEMENT.

1. Remove lockwire securing filter bowl (4, [figure 28-12](#)) to filter valve (1).
2. Remove filter bowl (4) and filter element (3). Discard used filter element, and packing (2, 5, and 6).
3. Install new filter element (3), packings (2, 5, and 6) and filter bowl (4).
4. Install filter bowl (4) on filter body (7) and tighten until packing (5) contacts filter body. Mark a vertical line on filter bowl and body.
5. Tighten bowl 60 to 90 degrees past mark.

NOTE

Turning bowl 60 degrees past the reference mark will normally prevent any leakage. If leakage occurs at this point, continue tightening to a maximum of 90 degrees (90 degrees represents 150 inch-pounds (16.95 Nm)).

6. Install lockwire to secure filter bowl (4) to filter valve (1).
7. Bleed air from fuel system. Refer to [Chapter 5](#) Special Inspections.

28-51. REMOVAL AND INSTALLATION — 52-2889-016 OR 52-2889-016A FILTER ELEMENT.

1. Remove lockwire securing filter bowl (4, [figure 28-13](#)) to filter valve (1).
2. Using a strap wrench, remove the filter bowl (4) and filter element (5). Discard used filter element, gaskets (6), and packing (7 and 3).
3. Install filter element (5), gaskets (6), and packing (7) in filter bowl (4).

4. Install bowl (4) on filter body (8) and tighten until packing (7) contacts filter body. Draw a vertical line on filter bowl and body.

5. Accomplish [steps 5. through 7. of paragraphs 28-50](#).

28-52. REMOVAL AND INSTALLATION — 222-366-621-101 FILTER ELEMENT.

1. Remove lockwire securing bowl retainer (4, [figure 28-14](#)) and drain valve (1).
2. Drain fuel from filter bowl (5) and remove drain valve (1), retainer nut (2), and packing (3) from filter bowl.
3. Remove filter bowl (5), packing (8), filter element (7), and gaskets (6). Discard packings, filter element, and gaskets.
4. Install filter element (7), and gaskets (6) in filter bowl (5). Ensure that gaskets are installed with concave side facing the filter element.
5. Lubricate all packings with approved fuel, and install packing (8) in filter body (9).
6. Install filter bowl (5) with filter element (7) and gaskets (6) in filter body and tighten retainer bowl (4) **T**.
7. Install packing (3), retainer nut (2), and drain valve (1). Secure drain valve to retainer nut with lockwire.
8. Bleed air from fuel system. Refer to [Chapter 5](#) Special Inspection.

28-53. AIRFRAME MOUNTED FUEL FILTER.

A fuel filter is mounted to structure on left side of engine compartment (right side of forward firewall on helicopters S/N 3387 and subsequent). Fuel filter ([figure 28-15](#)) consists of a replaceable filter element, drain valve, bypass valve, impending bypass switch, and manual test button. The airframe mounted fuel filter assembly eliminates requirement for adding anti-icing additive to fuel supply when temperatures are below 40°F (4°C). Indication of impending bypass lights the A/F FUEL FILTER segment on pilot caution panel.

NOTE

Filter element must be replaced when caution light comes on during engine operation. Replace filter element at same hourly interval as engine fuel filter maintenance is performed or 300 hours. (Refer to Allison 250-C20 Series Operation and Maintenance Manual, 10W2.)

NOTE

Refer to Service Instruction No. 206-65 for detailed installation instructions and wiring diagrams.

Purge fuel system after any filter maintenance (Chapter 12).

28-54. AIRFRAME MOUNTED FUEL FILTER — REMOVAL

1. Remove filter element (1, Figure 28-15) as follows:

a. Cut and remove lockwire securing filter bowl retainer (2) and drain valve (3).

b. Remove drain valve (3) and drain fuel from filter bowl (4).

c. Remove filter bowl retainer (2) and filter bowl (4) from filter head (5).

d. Remove filter element (1) from filter bowl retainer (2). Discard packings (6, 7, 8, and 9).

28-55. AIRFRAME MOUNTED FUEL FILTER — INSPECTION

1. Remove contamination and residual water from filter bowl (4, Figure 28-15).

2. Examine filter element (1) for evidence of contamination. Ice crystals and water found present in the filter element may be removed. No other contaminant is removable.

3. At each fuel filter element (1) change interval, remove fitting from outlet port of filter head (5). Using a 0.020-inch (0.51-mm) wire, pass wire through outlet bleed port to ensure that bleed port is not clogged.

4. Reinstall fitting to outlet port of filter head (5). Torque 235 to 265 inch-pounds (27 to 30 Nm).

NOTE

Use new filter element replacement kit KD651511 (FMC 05160) if element is contaminated or due for time replacement.

5. Refer to applicable JetRanger Flight Manual for daily inspection requirement.

28-56. AIRFRAME MOUNTED FUEL FILTER — INSTALLATION

1. Lubricate all packings with approved fuel.

2. Install new packings (7, 8, and 9, Figure 28-15).

3. Install new packing (6) in filter head (5).

4. Install filter bowl (4) with filter element (1), and gaskets (10 and 11) into filter head (5). Tighten filter bowl retainer (2) .

5. Install drain valve (3) and secure with filter retainer bowl (2) to filter bowl (4) tab using lockwire.

6. Bleed air from fuel system.

NOTE

When purging airframe and engine fuel system of air, ensure both fuel boost pumps are on and motor engine for approximately 15 seconds or until no evidence of air is coming from the fuel supply hose. In addition, depress airframe fuel filter bypass indicator button during motoring operation to remove air more rapidly.

Refer to Rolls-Royce 250-C20 Series Operation and Maintenance Manual, 10W2 for engine fuel system maintenance requirements.

7. Run engine and check for fuel leaks.

28-57. ENGINE FUEL FILTER

Refer to Rolls-Royce 250-C20 Series Operation and Maintenance Manual, 10W2 for detailed maintenance instructions.