AP105B-03105-5F

Issued August 1980

ACCUMULATOR TYPE 08394Y A02 (DOWTY ROTOL)

BAY SERVICING SCHEDULE

BY COMMAND OF THE DEFENCE COUNCIL

Frank Cooper.

Ministry of Defence

Sponsored for use in the

ROYAL AIR FORCE by HQRAFSTC ME(057)

Prepared by Central Servicing Development Establishment, RAF

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AP 100B-01 Order 0575 (RAF)

BAY SERVICING SCHEDULE
HYDRAULIC ACCUMULATOR
27QM/4117998

AP105B-03105-5F

AMENDMENT RECORD CERTIFICATE

1. This certificate is for Ministry of Defence (Air) ALs only.
2. Amendments are to be inserted in numerical sequence except where Non-Availability slips for particular ALs are issued.

AL No.	AL MONTH AND YEAR OF ISSUE	AMENDMENT INCORPORATED SIGNATURE	DATE OF INCORPORATION
1		R. W. Gerrard	12-3-81
2	DEC 97	P Walsh M.	05-01-98.
3			
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PF 60

MINISTRY OF DEFENCE

DECEMBER 1997

Amendment 2
(Final Amendment)
to
AP105B-03105-5F
Issued August 1980

BAY SERVICING SCHEDULE
ACCUMULATOR
TYPE 08394Y A02
(DOWTY ROTOL)

This publication has been declared obsolete and should be destroyed unless for any reason it is desired to retain the publication. In this event the cover label/title page should be clearly marked 'OBSOLETE' and this leaf should be inserted in the front of the publication.

BAY SERVICING SCHEDULE
HYDRAULIC ACCUMULATOR
27QM/4117998

SAFETY PRECAUTIONS

1. AP105B-0001-5F is to be complied with throughout the work detailed in this schedule.

2. Trichloroethane (Inhibisol). Trichloroethane (33D/2203782) also known as Inhibisol, has a strong degreasing action on the skin. The following health precautions are to be observed:

a. All unnecessary exposure to the vapour is to be avoided.

b. The work area is to be well ventilated. Suitable respirators are to be worn if Trichloroethane (Inhibisol) is used in an enclosed space.

c. Smoking, eating and drinking in the work area is prohibited.

d. Care is to be taken to prevent splashing when handling the fluid. If necessary, goggles or eye shields are to be worn. If any of the liquid does enter the eyes, they are to be flushed immediately with clean running water and the Station Medical Centre informed.

e. Rubber gloves are to be worn, and any portion of the skin liable to come into contact with the fluid is to be protected by a barrier cream. If the skin is splashed the affected parts are to be thoroughly washed with soap and clean water as soon as possible.

3. Hydraulic Components - Chlorinated Solvents. Chlorinated solvents such as Trichloroethane (also known as Inhibisol and Genklene) combine with minute amounts of water found in operating hydraulic systems, to form hydrochloric acid which will corrode internal metallic surfaces. All internal surfaces and drillings of hydraulic components are to be dry and free from residual solvent before assembly and installation.

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BAY SERVICING SCHEDULE
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SERVICING NOTES

1. AP105B-0001-5F is to be complied with throughout the work detailed in this schedule.

2. Clean all metal parts with Trichloroethane (33D/2203782) and dry using compressed air.

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SERVICING RECORD

Aircraft/Equipment
Ser No:
Date:

Sheet 3

HYDRAULIC ACCUMULATOR
27QM/4117998

Housman Ref No	Tradesman Initials	Brief Details of Suspected Defect and MOD F720 ORN When Applicable	Supervisor Man Hrs	Supervisor Initials
1	2	3	4	5

SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

AUTH	ITEM NO.	ITEM	OPERATION	APPLIC-ABILITY

BAY SERVICING SCHEDULE
HYDRAULIC ACCUMULATOR
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SPECIAL TOOLS AND EQUIPMENT

Reference	Nomenclature	Qty
4X/4657570	Lamp Ultra Violet	1

	MATERIALS	NATO CODE NO.	
4X/2241603	Ardrox PR551		As Required
4X/2246236	Ardrox 9VF1(T)		"
4X/2241604	Ardrox 9D6		"
33D/2203782	Trichloroethane		"
34B/2204466	Grease XG-315	G-394	"
30A/9437135	Wire Locking, Chromium Nickel, 0.711 mm (22 SWG)		"

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SERVICING RECORD

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AIRFRAME
Sheet 5
AL1

BAY SERVICING SCHEDULE
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Tradesman Initials	Brief Details of Suspected Defect and MOD F720 ORN When Applicable	Supervisor Man Hrs	Supervisor Initials
2	3	4	5

SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

1.	**Preparation**	
1.1	Introduction.	Read.
1.2	Safety Precautions.	
1.3	Servicing Notes.	
2.	**Dismantling**	
2.1	Banjo union. (2 off).	Remove.
2.2	Banjo union bonded seal. (4 off).	Remove and discard.
2.3	Locking clip.	(i) Remove.
2.4	Locking plate.	(ii) Examine.
2.5	End fitting.	
2.6	Stop ring.	
2.7	Sealing ring.	Remove and discard.
2.8	Piston.	Extract, using two holes provided.
2.9	Piston duplex seal.	Remove and discard.
2.10	Piston ring. (3 off).	(i) Remove. (ii) Examine.
3.	**Examination** (Fig.1)	
3.1	Piston.	(i) Clean. (ii) Apply Ardrox 9VF1(T) penetrant. (Minimum contact time 20 minutes). (iii) Remove excess penetrant using absorbent paper or lint free cloth, moistened with Ardrox 9PR 551. (iv) Apply Ardrox 9D6 developer. (Minimum contact time 10 minutes). (v) Examine. (vi) Clean. Note: An Ultra Violet lamp may be used to ensure excess penetrant removed in Sub-item 3.1 Operation (iii) and to assist examination, Sub-item 3.1 Operation (v).

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Date:

SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

Tradesman Man Hrs	Tradesman Initials	Brief Details of Suspected Defect and MOD F720 ORN When Applicable	Supervisor Man Hrs	Supervisor Initials
1	2	3	4	5

3. Examination (Contd)

3.2 Cylinder. Examine.

4. Assembling

4.1 This Sub-item is applicable only if defects are found during Sub-item 2.10 Operation (ii).
Piston ring. (2 off).
(i) Fit new item.
(ii) Radius flat face edges. Maximum 0.4 mm (0.0156 in.).
(iii) Check gap 0.229-0.305 mm (0.009-0.012 in.).

4.2 Piston duplex seal. Fit new item.

4.3 This Sub-item is applicable only if defects are not found during Sub-item 2.10 Operation (ii).
Piston ring. (3 off).
(i) Refit.
(ii) Check gap 0.229-0.305 mm (0.009-0.012 in.).

4.4 Piston. Refit.

4.5 Sealing ring. Fit new item.

4.6 Stop ring.
4.7 End fitting.
4.8 Locking plate.
Refit.

4.9 Locking clip. Refit, ensuring screw assembly opposite locking plate.

4.10 Banjo union bonded seal. (4 off). Fit new item.

4.11 Banjo union. (2 off). Refit.

5. Testing

5.1 Cylinder waisted portion.
(i) Measure diameter.
(ii) Measure diameter at 90° to measurement in Operation (i).
(iii) Record measurements.

Continued

Tradesman Initials	Brief Details of Suspected Defect and MOD F720 ORN When Applicable	Supervisor Man Hrs	Supervisor Initials
2	3	4	5

SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

5. Testing (Contd)

5.2	Accumulator air connection.	(i)	Connect to test rig.
		(ii)	Pressurize 310 bar (4,500 lbf/in2).
		(iii)	Look for signs of leaks.
		(iv)	Release pressure.
		(v)	Disconnect from test rig.
5.3	Accumulator hydraulic connection.	(i)	Connect to test rig.
		(ii)	Pressurize 310 bar (4,500 lbf/in2).
		(iii)	Look for signs of leaks.
		(iv)	Release pressure.
		(v)	Disconnect from test rig.
5.4	Cylinder waisted portion.	(i)	Repeat Sub-item 5.1 Operations (i) and (ii).
		(ii)	Compare measurements with those recorded in Sub-item 5.1 Operation (iii). Note: No increase in diameter is permissable.

NB Sub-items 5.5 to 5.6 inclusive are applicable only if increase in diameter is recorded at Sub-item 5.4. Operation (ii).

5.5	Cylinder.	Replace.	
5.6	Accumulator.	Repeat Sub-items 5.1 to 5.4 inclusive.	
5.7	Accumulator air connection.	(i)	Connect air supply.
		(ii)	Pressurise 113.5 bar (1650 lbf/in2).
5.8	Accumulator.	(i)	Immerse in oil OM-15 (NATO H-515) hydraulic connection uppermost.
		(ii)	Look for signs of leaks.
		(iii)	Remove from oil OM-15 (NATO H-515).
5.9	Accumulator hydraulic connection.	(i)	Connect to test rig.
		(ii)	Pressurise 227.5 bar (3300 lbf/in2).
5.10	Accumulator.	(i)	Immerse in oil OM-15 (NATO H-515) air connection uppermost.
		(ii)	Look for signs of leaks.
		(iii)	Remove from oil OM-15 (NATO H-515).

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SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

				Tradesman Man Hrs	Tradesman Initials	Brief Details of Suspected Defect and MOD F720 ORN When Applicable	Supervisor Man	Supervisor Initials
				1	2	3	4	5
5.	Testing (Contd)							
5.11	Accumulator hydraulic connection.	(i) (ii)	Release pressure. Disconnect from test rig.					
5.12	Accumulator air connection.	(i) (ii)	Release pressure. Disconnect from test rig.					
6.	Completion							
6.1	Accumulator.		Drain.					
6.2	Banjo union. (2 off).		Lock with wire 0.711 mm (22 SWG).					
6.3	Dust cap. (2 off).		Fit.					
6.4	Documentation.		Complete.					

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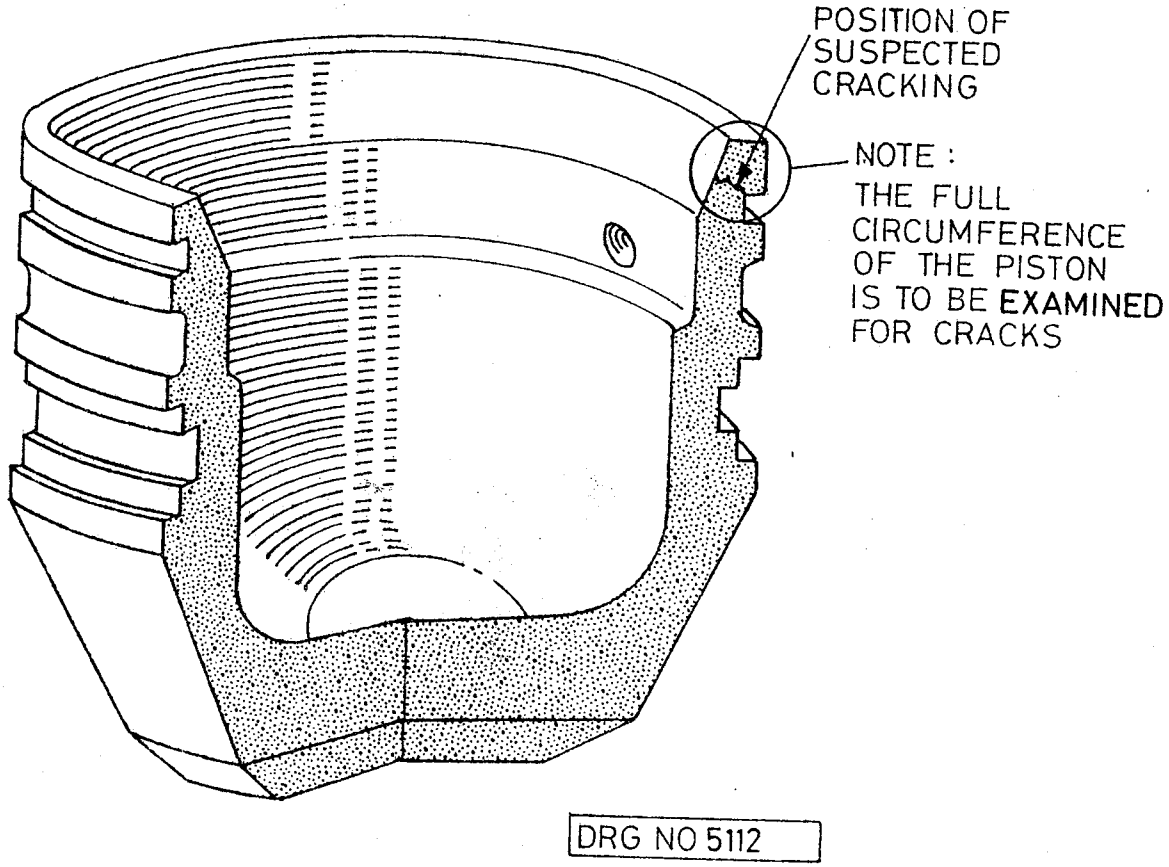

Fig.1 Accumulator Piston

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