Airbrakes Functional Check

AFSC
43151 42152
43171 42172
32551

TIME EST

Safety and Servicing Notes are to be complied with throughout the work detailed on this card.

ASSOCIATED PROCEDURES
SP603 (AF)
SP127 (P)

SPECIAL TOOLS AND EQUIPMENT

Pitot/Static test set MK3 (6C/1042139).
Tyre inflation rig (4G/1050542).
Canopy seal guards F53 (26DK/95129 - Left).
Canopy seal guards F53 (26DK/95130 - Right).
Canopy seal guards T55 (26DK/95252 - Left).
Canopy seal guards T55 (26DK/95253 - Right).

NOTE: During this servicing procedure No.2 engine hatch or jury strut must be fitted at all times.

43151/42152

1. PREPARATION

1.1	Ground air charging/ release connexion (Access panel 63P (left)).	Remove blank.
1.2	Services system hydraulic pressure.	Release pressure by operating brake lever.
1.3	Hydraulic test trolley.	(i) Prime. (ii) Bleed.
1.4	No.1 Services ground test connexions (Access panel 45P (left)).	Connect hydraulic test trolley.
1.5	Hydraulic reservoir (Services).	Replenish (SP 603(AF)).
1.6	Tyre inflation rig (4G/1050542).	(i) Connect to ground air charging/release connexion (Access panel 63P (left)). (ii) Set rig to deliver a pressure of between 16 and 18 lbf/in2.
1.7	Canopy seal guards.	Ensure fitted.
1.8	External d.c. power supply.	(i) Connect. (ii) Set to ON.

Continued Overleaf

PRINTED IN ENGLAND

Safety and Servicing Notes are to be complied with throughout the work detailed on this card.

43151/42152

1. PREPARATION (continued)

1.9	External a.c. power supply.	(i) Connect. (ii) Set to ON.
1.10	Pitot/Static test set.	Connect.

2. TESTING

2.1	Services system.	Pressurize to 3000 lbf/in2.

NOTE: Sub items 2.2 to 2.6 inclusive must be carried out on pupils selector switch (T55).

2.2	Airbrake selector switch.	Set to OPEN and CLOSE three times, ensuring airbrakes complete full travel when selector switch is released to neutral position.
2.3	Airbrake indicator.	Ensure operating correctly.
2.4	Airbrake selector switch.	(i) Set to OPEN and on completion of travel, set to CLOSE. (ii) Check that No.1 services hydraulic pressure does not drop below 2700 lbf/in2.
2.5	Airbrakes.	(i) Set to OPEN. (ii) Check opening time (7.5 secs maximum). (iii) Set to CLOSE. (iv) Check closing time (5 secs maximum).
2.6	Airbrake doors.	Check that doors synchronize within 3 degrees of each other. (1.75 in. measured at airbrake trailing-edge when opening and closing).
2.7	Airbrakes.	Set to open.

32551/43151

3. TESTING

NOTE: Sub-items 3.1 to 3.11 inclusive must be carried out on pupils selector switch (T55).

Continued

Safety and Servicing Notes are to be complied with throughout the work detailed on this card.

32551/43151

3. TESTING (contd)

3.1	Pitot/Static system.	Pressurize to an equivalent of 1.5 mach.
3.2	Airbrakes.	Ensure revert to closed position.
3.3	Airbrake selector switch.	Set to OPEN.
3.4	Airbrakes.	Ensure remain in closed position.
3.5	Pitot/Static system.	Release pressure.
3.6	Airbrake selector switch.	Set to OPEN.
3.7	Pitot/Static system.	Pressurize to an equivalent of:- 1.275 mach Mk 53; 1.2 mach Mk 55 .
3.8	Airbrakes.	Ensure revert to closed position between 1.25 and 1.30 mach Mk 53; 1.17 and 1.22 mach Mk 55 .
3.9	Airbrake selector switch.	Set to OPEN.
3.10	Airbrakes.	Ensure remain in closed position.
3.11	Pitot/Static system.	Release pressure.

43151/42152

4. INSTRUCTORS OVERRIDE CHECK (T55)

4.1	Airbrakes.	Ensured closed.
4.2	Instructors airbrake selector switch.	Hold to closed position.
4.3	Pupils airbrake selector switch.	Set to OPEN.
4.4	Airbrakes.	Ensure remain in closed position.
4.5	Airbrake selector switch (Instructors and Pupils).	Allow to revert to neutral position.
4.6	Airbrakes selector switches. (Instructors and Pupils).	Set to OPEN.
4.7	Airbrakes.	Ensure fully open.
4.8	Instructors airbrake selector switch.	Hold to OPEN position.

Continued Overleaf

Safety and Servicing Notes are to be complied with throughout the work detailed on this card.

43151/42152

4. INSTRUCTORS OVERRIDE CHECK (T55) (contd)

4.9	Pupils airbrake selector switch.	Set to CLOSE.
4.10	Airbrakes.	Ensure remain in open position.
4.11	Airbrake selector switches (Instructors and Pupils).	Allow to revert to neutral position.
4.12	Airbrake selector switches (Instructors and Pupils).	Set to CLOSE.
4.13	Airbrakes.	Ensure CLOSED.

43171/42172 (INSPECTOR)

5. INSPECTION STAGE

5.1	Inspect.	After component replacement or if the system has been disassembled.

43151/42152

6. COMPLETION

6.1	Pitot/Static test set.	Remove.
6.2	Services system.	Release pressure by operating brake lever.
6.3	External d.c. power supply.	(i) Set to OFF. (ii) Disconnect.
6.4	External a.c. power supply.	(i) Set to OFF. (ii) Disconnect.
6.5	Tyre inflation rig (4G/1050542).	(i) Disconnect at ground air charging/release connexion. (ii) Fit blank and wirelock.
6.6	Hydraulic test trolley.	(i) Disconnect. (ii) Remove.

Continued

43151/42152

6. COMPLETION (Contd)

6.7	Hydraulic pump quick release connexions (Services access panel 45P (left)).	(i) Reconnect to aircraft. (ii) Wirelock.
6.8	Hydraulic reservoir (Services).	Replenish (SP 603(AF)).
6.9	Access panels.	Refit.
6.10	Canopy seal guards.	Ensure removed.

43250/43171

7. GROUND RUN NO.1 AND NO.2 ENGINES

7.1	Engines (No.1 and No.2).	Start (SP 127 (P)) and run at 65 per cent.
7.2	Airbrake selector.	(i) Set to OUT. (ii) Check airbrake opening time (4 seconds maximum). (iii) Set to CLOSE. (iv) Check airbrake closing time (3.5 seconds maximum).
7.3	Engines (No.1 and No.2).	Shut down (SP 127 (P)).

NOTE: All wirelocking to be of 22 SWG stainless steel locking wire unless otherwise stated.