

## Group 12

## BOMB FUZING AND RELEASE - NORMAL

(Completely revised)

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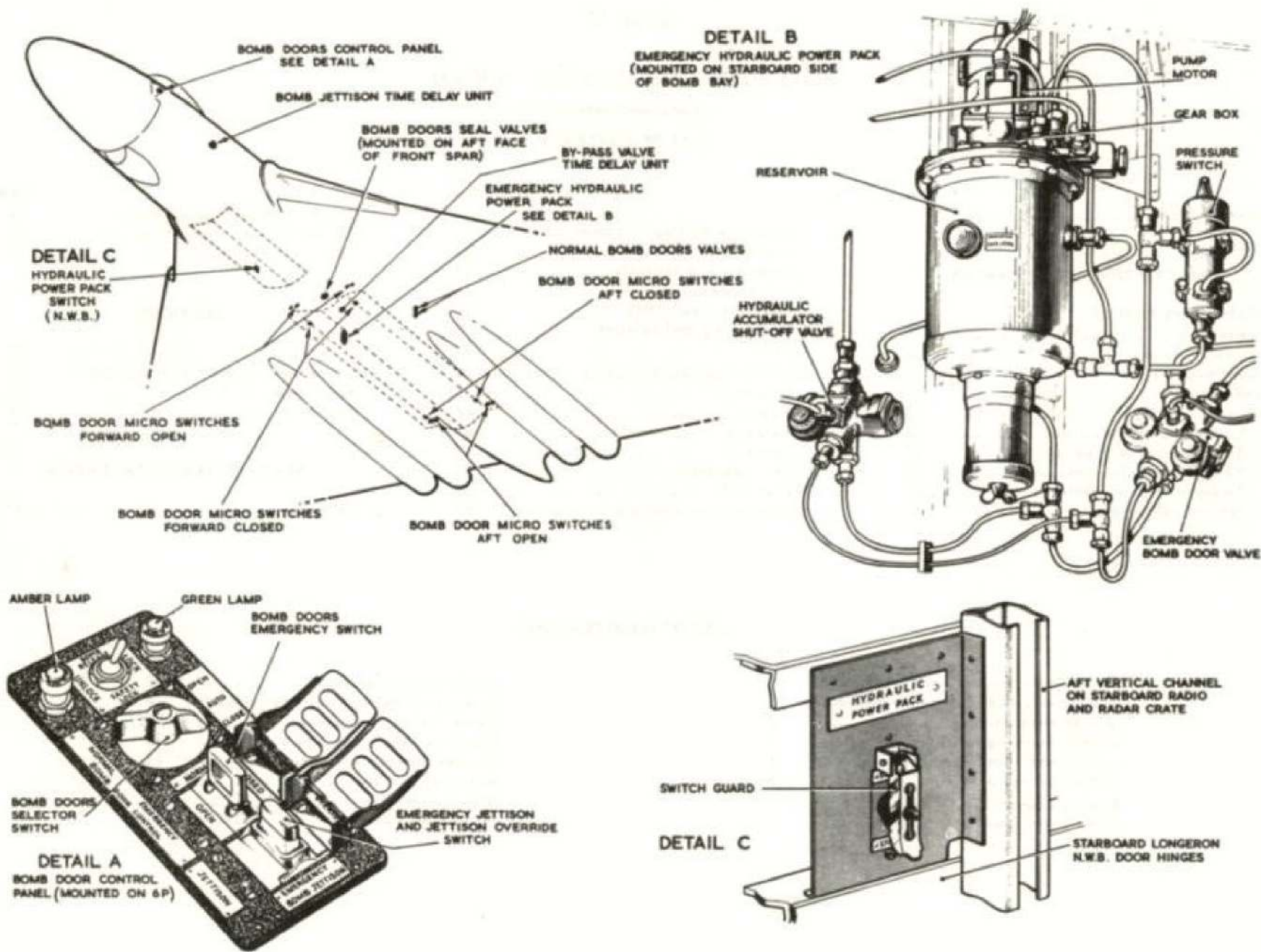


Fig. 1. Bomb doors control and equipment  
(Mod. 1130)

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**Introduction**

1. This group contains descriptive and servicing information on the control system for normal and emergency operation of the bomb doors, and on circuits which form the normal bombing installation. Illustrations showing the location of equipment are included along with theoretical circuit diagrams. The asso-

ciated routing charts are provided at the end of the text.

2. With this amendment the following modifications are included:-

Mod.1372 - Deletion of emergency jettison wiring for 2000 lb. and 7000 lb. stores.

Mod.1438 - Introduction of double-pole wander bomb firing switches in lieu of single-pole switches.

Mod.1665 - Introduction of Diamond H relay 717 in N.B.S. isolation circuit.

**DESCRIPTION AND OPERATION****BOMB DOORS CONTROL****General**

3. Bomb doors operation is controlled by a series of electrically-operated selector valves in the hydraulic system. These valves control the operation of the bomb door jacks. In normal flight conditions, or when hydraulic pressure is available from a ground servicing trolley, control of the bomb doors is by two of the selector valves employed in the main hydraulic system. For emergency flight conditions and occasional ground use, control of the bomb doors is obtained by a third selector valve employed in a separate hydraulic system pressured by an emergency hydraulic power pack.

4. The forward and aft ends of the bomb bay are equipped with inflatable seals, to assist in the minimising of heat losses from the bomb bay when the doors are closed. The seals are inflated from the pneumatic system, inflation and deflation being controlled by two electrically operated unimatic valves, one for each seal. The electrical circuit is so arranged that the seals are inflated after the bomb doors have closed, and deflated on the selection of bomb doors open. This sequence of events is effected by the bomb doors micro switches.

**Micro switches**

5. Eight micro switches, Downmic Type C.1831Y, are employed for bomb doors position indication, bomb doors seal inflation and deflation, bomb jettison control and signal supplies to and/or from the following installations:-

- (1) Auto-pilot/N.B.S. (Book 3)
- (2) Bomb gear (Para. 41)
- (3) Special stores (Group 13)

6. Four of these micro switches are used to give visual indication of doors closed, and when the doors are open, provide a signal to the auto-pilot/N.B.S. system. They are installed at the inner hinge on the port and starboard bomb doors, two forward and two aft, the two forward ones operating the bomb doors seals unimatic valves in addition to their indication function.

7. The other four switches are used to give a signal of bomb doors fully open to the auto-pilot/N.B.S. system, normal and special stores circuits. Jettisoning of normal stores is controlled by all four of these switches. The two forward switches are installed at the port and starboard ends of the forward bomb door

jack beam, on mountings at the forward face. The two aft switches are installed at the port and starboard ends of the aft bomb door jack beam, on mountings at the aft face.

8. Four additional doors open micro switches of the same type are installed in tandem with those detailed in para.7. These micro switches are peculiar to the special stores installation (Group 13).

**Controls, manual**

9. The bomb doors are controlled by suitable switches installed on panel 6P, the pilot's port console. The switches are:-

- (1) Normal bomb doors selector switch. A 3-position rotary selector switch labelled OPEN-AUTO-CLOSE.
- (2) Bomb doors emergency switch. A double-pole change-over switch labelled OPEN-NORMAL-CLOSED.
- (3) Emergency bomb jettison switch. A single-pole 3-position switch, spring-loaded to the centre off position and labelled JETTISON-OVERRIDE.

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#### Controls, automatic

10. The bomb doors can be closed after a preset time, by the jettison time delay unit, located just aft of 3P in the crew's compartment.

#### Indication

11. One magnetic indicator gives indication of bomb doors fully closed, and inversely not closed. The indicator, Ref. No. 5CZ/5074, is situated on the pilots' panel 1P and presents a white face with doors not closed, a black face with doors fully closed.

#### Circuit operation

12. The following sequence of operations should be read in conjunction with the theoretical circuit diagram contained in fig.2. For normal, automatic and jettison control it is assumed that the bomb doors emergency switch is in the NORMAL position.

#### Normal selection

13. The bomb doors circuit is shown with the bomb doors closed, and from fig. 2 it will be seen that:-

- (1) The bomb doors indicator on the pilots' panel is energised by a supply from fuse 494, via contacts 2-3 of the four bomb doors closed micro switches connected in series. The indicator presents a black face.
- (2) The close solenoids of the normal bomb doors valves are energised by a supply from fuse 101, via normally closed contacts 5/3, 6/4 and 282/2, the return to earth being via normally closed contacts 282/1.
- (3) The solenoids of the bomb doors seals pneumatic valves are energised by a supply from fuse 101,

via normally closed contacts 5/3, 6/4, 282/5, and the port and starboard forward doors closed micro switches contacts 5-6.

14. On placing the bomb doors 3-way selector switch to the OPEN position the following circuit action takes place:-

- (1) A 28-volt supply from fuse 101 will energise the coil of relay 5, via the bomb doors selector switch.
- (2) Opening of contacts 5/3 will disconnect the supply from the close solenoids of the bomb doors valves and the solenoids of the bomb doors seal valves. The bomb doors seals will now deflate.
- (3) Closing of contacts 5/2 will connect a supply from fuse 101 to energise the open solenoids of the normal bomb doors valves, via normally closed contacts 282/3. The bomb doors will thus commence to open.

15. As the doors commence to open, the bomb doors indicator on the pilots' panel will be de-energised by operation of the bomb doors closed micro switches to present a white face. Note that the supply circuit from fuse 494 to the auto-pilot/N.B.S. is so wired that should any one, two or three of the four micro switches fail to operate, the supply will be completed via the respective contacts of the other micro switches.

16. On reaching the fully open position, the bomb doors will operate the open micro switches, and a supply from fuse 495 will be fed, via the series 2-3 contacts, to the following installations:-

- (1) Auto-pilot/N.B.S.
- (2) Bomb gear.
- (3) Special stores.

17. Placing the selector switch to CLOSE, will de-energise the coil of relay 5, causing its contacts to revert to the original positions. This action will cause the open solenoids of the bomb doors valves to be de-energised by the changeover of contacts 5/2 and 5/3, which will now energise the close solenoids of the bomb doors valves.

18. The bomb doors will now commence to close, and the doors open micro switches will revert to their original positions, cutting the supply to the installations referred to in para.16. As the doors reach the fully closed position, the doors closed micro switches will revert to their original position and connect a supply to the solenoids of the doors seal valves, causing the seals to be inflated. At the same time, the indicator on the pilots' panel will become energised to present a black face.

#### Automatic selection

19. With the bomb doors selector switch at the AUTO position, the bomb doors can be opened automatically by a pulse from the N.B.S. This pulse is fed via the selector switch to energise relay 5. The bomb doors will be opened as described in paras. 14, 15 and 16, contacts 5/1 forming a hold-in circuit for relay 5. At the conclusion of bombing operations, the bomb doors are closed by placing the selector switch to the CLOSE position, when the events will be as in para.17 and 18.

#### Emergency selection

20. Should a failure occur in the main hydraulic system, the bomb doors can be operated from the emergency hydraulic system. This system is powered by the emergency hydraulic power pack (para. 34), and the circuit operation of the bomb doors using the power pack is given in the following paragraphs.

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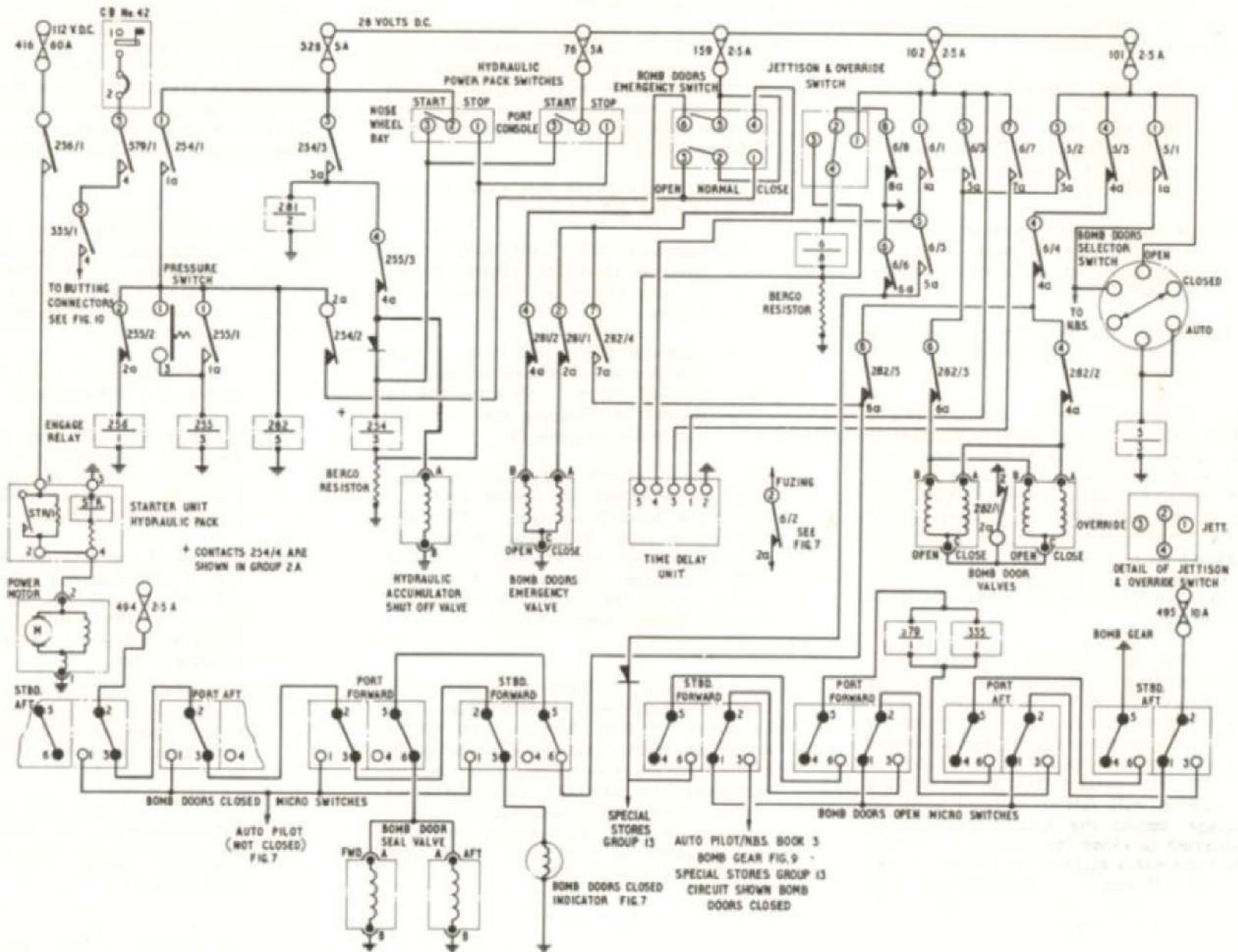


Fig. 2 Bomb doors and emergency hydraulic power pack controls

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21. Reference to fig.2 will show that with the bomb doors emergency switch placed to OPEN, the following circuit action will take place:-

- (1) The open solenoid of the emergency bomb doors valve will be energised by a supply from fuse 159 via contacts 5-6 of the control switch and normally closed contacts 281/2.
- (2) Relay 282 will be energised from fuse 159 via contacts 2-3 of the control switch and normally closed contacts 254/2.
- (3) Relay 256 will be energised via normally closed contacts 254/2 and 255/2.

22. Opening of relay contacts 282/1, 282/2 and 282/3 will completely isolate the normal doors valves from the circuit and earth, thereby isolating any fault in the normal hydraulic system. The opening of contacts 282/5 and closing of contacts 282/4 will transfer the circuit from the bomb doors seal valves from the normal to the emergency system. As no supply is available at contacts 282/4, the seals will deflate.

23. Closing of relay contacts 256/1 will connect a supply from fuse 416 to the emergency hydraulic power pack motor via the starting resistance in the starter unit, and the motor will rotate at a reduced speed. As the speed of the motor increases, the current through the starting resistance will fall to a level until the voltage across the coil STR/1 will be sufficient to close its contacts. At this point the motor will now run on full voltage and at full speed. Pressure will then build up in the hydraulic system and the bomb doors will begin to open.

24. Operation of the bomb doors micro switches is exactly the same as in normal operation, hence bomb doors indication and

supplies to other systems will be as described in paras. 15-16.

25. When the bomb doors are fully open, the hydraulic pressure will increase, and on reaching a nominal 4,000 p.s.i., will cause the pressure switch to close and energise relay 255. The following action will then result:-

- (1) Contacts 255/1 will close to hold in relay 255.
- (2) Contacts 255/2 will open to de-energise relay 256, thereby breaking the supply to the power pack motor.
- (3) Contacts 255/3 will open to isolate the wheel brakes accumulator shut-off valve. This function is related to charging the hydraulic accumulators (para.39).

The correct control action at this stage would be to select the control switch to the centre (normal) position. This will de-energise relay 255, thus leaving the circuit prepared for starting the power pack from other sources. A note on correct use of the control switch is contained in Book 1, Sect.3, Chap.6.

26. Placing the bomb doors emergency switch to CLOSE will cause similar circuit operation to that described for OPEN selection, except that the close solenoid of the bomb doors emergency valve will be energised from fuse 159 via contacts 5-4 of the control switch and normally closed contacts 281/1. This supply will also be available to the bomb doors seal valves via contacts 282/4.

#### *Emergency bomb jettison*

27. The bomb load may be jettisoned in the event of an emergency by use of

the emergency bomb jettison switch. No separate selection of the bomb doors is required, since opening of the bomb doors is automatic, being the first requirement of jettison function. The action to jettison may be overridden by use of the same switch, and providing the override action is taken before the bomb doors are fully open, jettison will not take place.

#### *Jettison*

28. Reference to fig.2 will show that when the emergency jettison switch is pressed momentarily to JETTISON, relay 6 will be energised from fuse 102 via contacts 1-4 of the switch to result in the following circuit action:-

- (1) Contacts 6/1 will close to form a hold-in circuit for relay 6.
- (2) Contacts 6/4 will open to isolate the close solenoids of the normal bomb doors valves, and de-energise the bomb doors seal valves, causing the seals to deflate.
- (3) Closing of contacts 6/5 and opening of contacts 6/6 will remove the safety earth and connect the supply to the bomb doors open micro switches in preparation for jettison action.
- (4) Contacts 6/3 will close to connect the supply from fuse 102 via normally closed contacts 282/3 to the open solenoids of the normal bomb doors valves.
- (5) Contacts 6/8 will open to remove the safety earth from terminal 2 of the emergency jettison switch, (a supply at terminal 4 is made via contacts 6/1).
- (6) Contacts 6/2 will open to break the supply to the bomb fuzing switches (para.46), thus ensuring safe jettison irrespective of fuzing selection.

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- (7) Contacts 6/7 will close to connect a supply to the time delay unit (terminal 3).

29. When the bomb doors are fully opened, the doors open micro switches will be operated, and the supply from fuse 102 (para.28, sub-para.3) will energise the jettison relays 335 and 579 via contacts 6-5 of the four micro switches.

30. The stores will now be jettisoned by a supply from C.B.42 via the operated contacts of the jettison relays.

31. After a time interval (preselected on the time delay unit) during which the stores have been jettisoned, a 28-volt supply will be fed from terminal 5 of the time delay unit to the earth side of relay 6. Relay 6 will then be de-energised. The contacts of the relay will revert to their normal positions and the close solenoids of the normal bomb doors valves will be energised from fuse 101, the supply for the bomb doors seal valves being fed from the same source. The bomb doors will now close as in the normal selection.

#### *Jettison override*

32. If, after jettison selection, it is found that jettison action is not required, the action can be stopped by pressing the jettison/override switch to OVERRIDE. This overriding action taken before the bomb doors are fully open will cause the doors to close and no stores will be jettisoned. Where bomb jettison is already taking place, selection of OVERRIDE will stop the jettison sequence and return the bomb doors to the closed position.

33. When the switch is pressed to OVERRIDE, a supply from fuse 102 will be fed via contacts 6/1 and terminals 4-3 of the switch to the earth side of relay 6. Relay 6 will be de-energised, thus cancelling the jettison action, and the bomb doors will close.

## EMERGENCY HYDRAULIC POWER PACK

### General

34. The emergency hydraulic power pack, driven by a Rotax electric motor Type EXP.4865, is installed on the starboard side of the bomb bay (fig.1). The unit consists of a high pressure radial pump built into a cylindrical casing, to which the electric motor and a filter assembly are mounted. The motor is driven from the 112-volt d.c. supply, via a heavy duty relay and starting contactor near the pack. The operating pressure, nominally 4,000 p.s.i. is regulated by a pressure switch in the electrical control circuit.

### Operation and controls

35. The power pack is provided for ground and emergency bomb doors operation, and for recharging the wheel brakes accumulators prior to the aircraft being towed. The power pack is switched on from one of three positions, namely:-

- (1) The EMERGENCY bomb door selector switch on the port console 6P.
- (2) The emergency hydraulic power pack STOP/START switch on the port console 6P.
- (3) The emergency hydraulic power pack STOP/START switch adjacent to 15P in the nose wheel bay.

### WARNING...

*The motor of the power pack is not continuously rated and must not therefore be allowed to run for more than one minute in any 20 minute period.*

### Circuit operation

36. The following sequence of opera-

tions should be read in conjunction with the theoretical circuit diagram fig.2. Details of the hydraulic circuit functions are given in Book 1, Sect.3, Chap.6.

### *Start-stop switches*

37. Pressing any one of the two start-stop switches momentarily to START will energise relay 254, the pilots' switch being fed from fuse 76, and the nose wheel bay switch from fuse 328.

38. The following action will then result:-

- (1) Contacts 254/3 will close to form a hold-in circuit for relay 254, fed from fuse 328 via normally closed contacts 255/3. This supply will also energise the solenoid of the accumulator shut-off valve, and energise relay 281.
- (2) Closing of relay contacts 254/1 and opening of contacts 254/2 will (a) energise relay 282, (b) energise relay 256 via contacts 255/2, and (c) isolate the bomb doors emergency switch circuit.
- (3) Contacts 281/1 and 281/2 will open to isolate the bomb doors emergency valve.
- (4) Contacts 282/1, 282/2 and 282/3 will open to isolate the normal bomb doors valves.
- (5) Changeover of contacts 282/4 and 282/5 will deflate the bomb doors seals, but has no real function in this application of the power pack.
- (6) Contacts 256/1 will close to connect a supply from fuse 416, via the starter unit resistance, to the power pack motor. The motor will commence to run, and as the speed increases, the applied voltage will be sufficient to energise relay STR.

- (7) Contacts STR/1 will then close to short out the starter unit resistance, thus applying full voltage to the motor.

39. Pressure will now build up in the hydraulic circuit. When the hydraulic pressure reaches a nominal 4000 p.s.i., the pressure switch will close and energise relay 255. The following circuit action will then occur:-

- (1) Contacts 255/1 will close to hold in relay 255.
- (2) Contacts 255/2 will open to de-energise relay 256, thereby breaking the supply to the power pack motor.
- (3) Contacts 255/3 will open to break the hold-in supply for relay 254, and also de-energise the accumulator shut-off valve.
- (4) Contacts 254/3 will open to de-energise relay 281, causing contacts 281/1 and 281/2 to reconnect the emergency bomb doors valve in the circuit.
- (5) Opening of contacts 254/1 will de-energise relay 282, which will reconnect the normal bomb doors valves and seal valves in the circuit.
- (6) Opening of contacts 254/1 will also de-energise relay 255, which will return the circuit to normal, i.e., to conditions prior to selection.

40. The system can also be switched off by pressing any one of the stop-start switches to STOP. This action will connect a supply from the respective fuse to the earth side of relay 254, thus de-energising the relay to cause the following action:-

- (1) Contacts 254/3 will open to break the hold-in supply for relay 254, and also de-energise the accumulator shut-off valve.
- (2) Contacts 254/3 will also open to de-energise relay 281, causing contacts 281/1 and 281/2 to close to reconnect the emergency bomb doors valves in the circuit.
- (3) Contacts 254/1 will open to de-energise relays 256 and 282, which will reconnect the normal bomb doors valves in circuit and stop the powerpack motor.

#### BOMB FUZING AND RELEASE

##### General

41. The following paragraphs contain descriptive information for the electrical controls employed in the normal bomb fuzing and release system.

42. The system can be selected by the nav. bomber for manual release or for automatic release under N.B.S. control. Further information on the N.B.S. will be found in Book 3, Sect.7, Chap.5.

43. The normal bombing installation uses three 7-way, 1,000 lb. carriers, Type AV.179, mounted transversely in the bomb bay, the various controls for the flying and release of the stores being positioned on the nav./bomber's panel 9P. A bomb firing switch is also provided at the prone air bomber's panel 8P. Removable control units for the system are mounted on the rear face of the front spar in the bomb bay as shown in fig.5.

##### Switches and control units

44. The switches and control units for the normal bombing circuits may be grouped according to their function as follows:-

Selection  
Fuzing  
Release  
Jettison

These operations are described in the following paragraphs.

##### Selection

45. The units listed below provide the means of selecting which bombs shall be released, and the spacing, pattern and distribution of release.

Switch selector and indicator,  
Type 11  
Bomb spacing unit, Type 11      Panel 9P  
Air burst control unit  
(Space provision)

Bomb distributor, Type 11  
Bomb distributor, Type 12      Bomb bay  
100-way preselector unit  
Air burst apparatus

A full description of each unit will be found in A.P.4343X, Vol.1.

##### Fuzing

46. Bomb fuzing is controlled by two switches, one labelled E.M., and the other labelled V.T., on the upper portion of 9P. A supply to the fuzing switches will be made when the bomb doors are in the fully open position. The bomb doors open micro switches (fig.2) will then complete the circuit from fuse 495 to the protective relay unit (fig.3) to result in relay 7 being energised. The fuzing switches will now be fed from fuse 40 via contacts 7/1 and 6/2. Note that when the emergency bomb jettison switch is selected to JETTISON (fig.2) relay 6 will be energised to open contacts 6/2 and isolate the fuzing circuits.

##### Release

47. Opening of the bomb doors results

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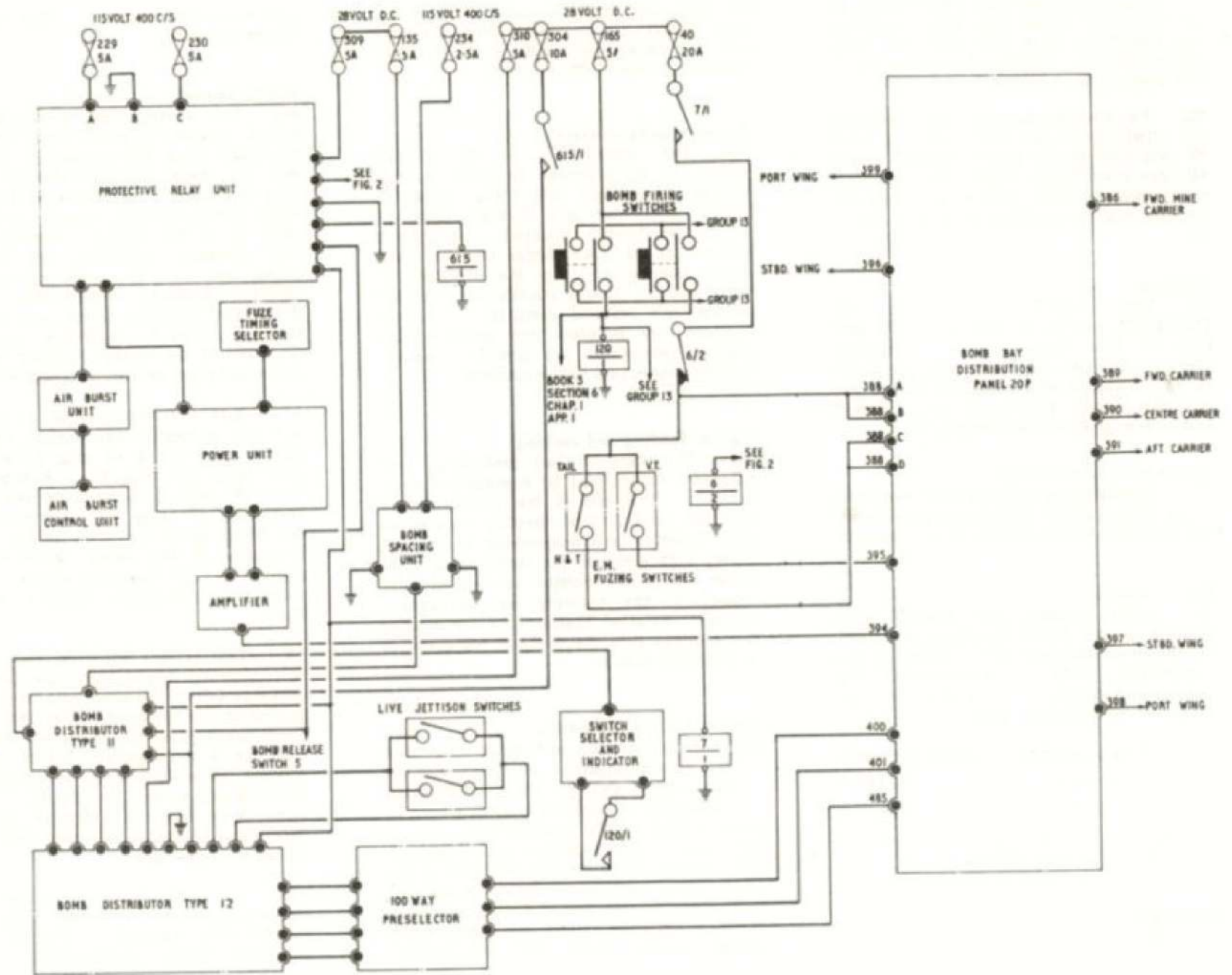


Fig. 3 Normal bombing installation

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in a supply being fed from fuse 495 (fig.2), via the bomb doors open micro switches and protective relay unit (fig.3) to energise relay 615. Closing of contacts 615/1 will prepare the circuits for release.

48. Two double-pole bomb firing switches are fitted, one on the nav./bomber's panel 9P and one on the prone bomber's panel 8P. Any bomb firing switch, when pressed, will energise relay 120 to complete the circuits via the switch selector and indicator.

#### *Jettison*

49. Two switches, labelled LIVE JETTISON, one on 9P and one on 8P provide for live jettisoning of the bombs. When bomb doors are fully open, operation of either switch will complete the circuit via the bomb distributor type 12 and enable the bombs to be released live.

#### *Power unit and amplifier*

50. Provision is made on the front spar in the bomb bay for including a power unit and amplifier in the system when required.

#### **Bomb carriers**

51. Three carriers Type AV.179, each carrying seven 1,000 lb. bombs are used in the normal bombing role. Hoisting and suspension units to accommodate the carriers are fitted, one port and one starboard, at the following stations:-

Forward station - Bomb arch 44.5

Centre station - Bomb arch 151.9

Aft station - Bomb arch 259

Full details of the Type AV.179 carrier will be found in A.P.1664A, Vol.1.

#### **Panel 20P**

52. This panel, mounted on the roof of

the bomb bay at bomb arch 182.9, is the main distribution panel between the control circuits and the carriers. The panel connections are shown in fig.3.

#### **Connection to carriers**

53. The connection of the aircraft wiring to the carriers is made by two butting connectors, one 2-way, Type AT 62615 (port) and one 20-way, Type AT 62599 (starboard) mounted in the bomb bay roof at the three carrier stations. The 2-way connectors carry the jettison circuits and the 20-way connectors carry the fuzing and release circuits. As the carriers are hoisted into position, the butting connectors are mated to similar butting connectors on the carriers.

#### **Carrier loading and locking**

54. The carriers are preloaded, then hoisted into position by special hydraulic jacks. The use of the jacks ensures that the carriers are correctly located on their hoisting and suspension units. A safety lock prevents the jacks being withdrawn until the carrier is mechanically locked to the hoisting and suspension units. Detailed instructions for loading the carriers into the aircraft are given in A.P.2852B, Vol.1.

#### **Carrier locking indication**

55. Each hoisting and suspension unit at the carrier stations is fitted with an internal micro switch, which is operated to close when the carrier locking wedge is fully locked on the hoisting and suspension unit. The switches are wired to a test socket fitted on the aft face of the front spar, and by plugging a cocking indicator test set into the socket, an indication will be given as each carrier wedge locks securely into the hoisting

and suspension unit. The circuit is shown in fig.11.

#### **N.B.S. control**

56. The system can be brought under N.B.S. control, in which case opening of the bomb doors and release of the bombs will be made automatically by signals from the N.B.S. Reference to fig.13, will show that the N.B.S. signals are fed from plug 12 of the N.B.S. junction box via two isolation switches, one for bomb doors and one for bomb release, each labelled NORMAL - ISOLATE on panel 9P. Two indicator lamps, one green and one red above the switches, provide indication of the N.B.S. signals for bomb doors and bomb release respectively.

57. With the switches set to NORMAL and the system under N.B.S. control, a supply from pin E of plug 12 will energise relay 717 (fig.13). A supply from fuse 195 will then be made across contacts 2-3 of relay 717, contacts 2-1 of the bomb doors isolation switch and the contacts of the bomb doors selection switch to open the bomb doors. At the same time the green indicator lamp will light.

58. Two further supplies from plug 12 will also be made, one from pin F via contacts 6-5 of the bomb release isolation switch to the protective relay unit and the bomb distributor, Type 11, and the other from pin A via contacts 2-3 of the bomb release isolation switch to energise the bomb firing relay 120 (fig.3). At the same time the red indicator lamp will light (the operation of relay 548 is described in Group 13).

59. The bomb doors and bomb release circuits can be isolated from N.B.S. control when required, by placing the two isolation switches to ISOLATE.

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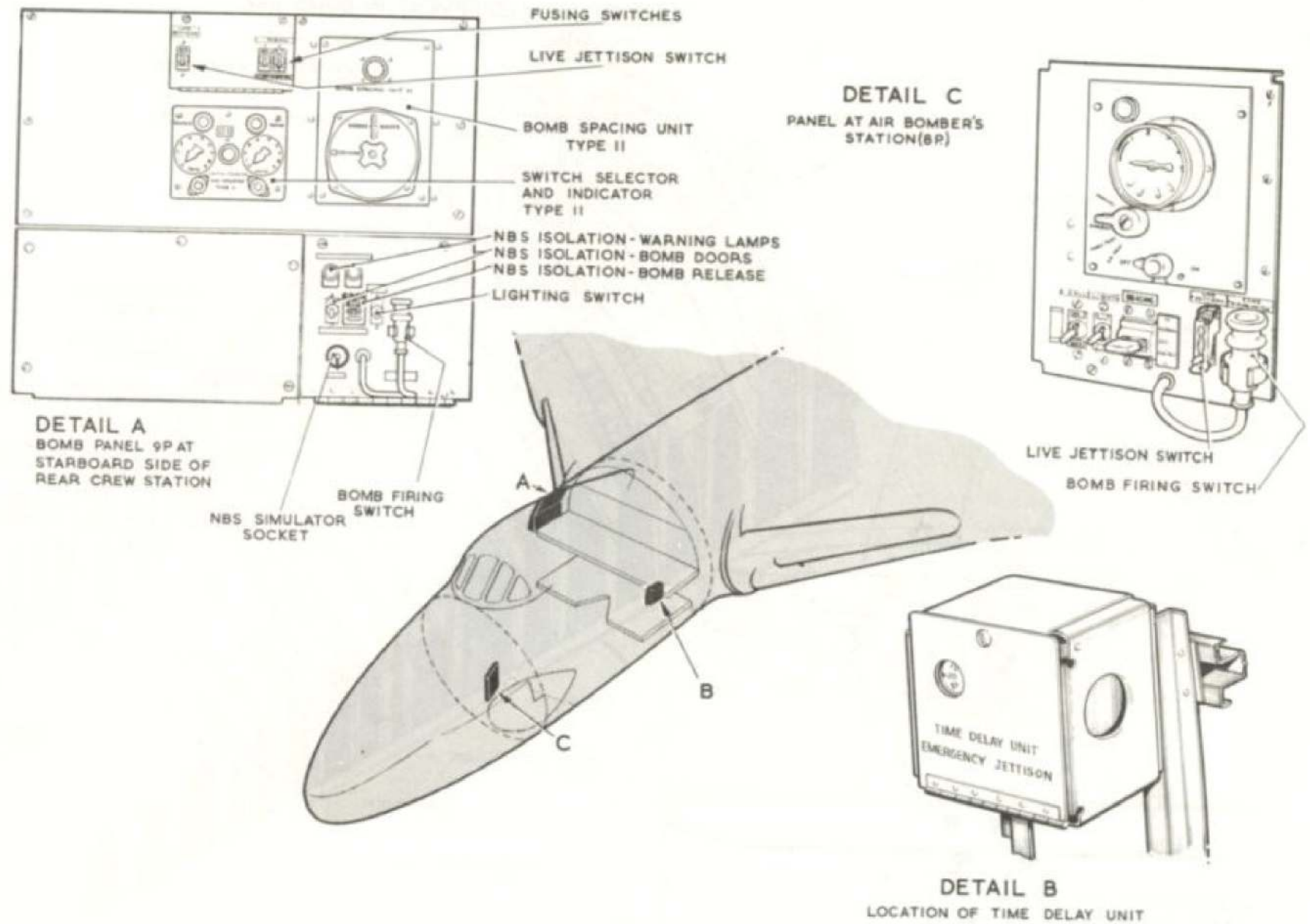


Fig. 4 Bomb panels and controls  
(1 Mod. 1438 +)

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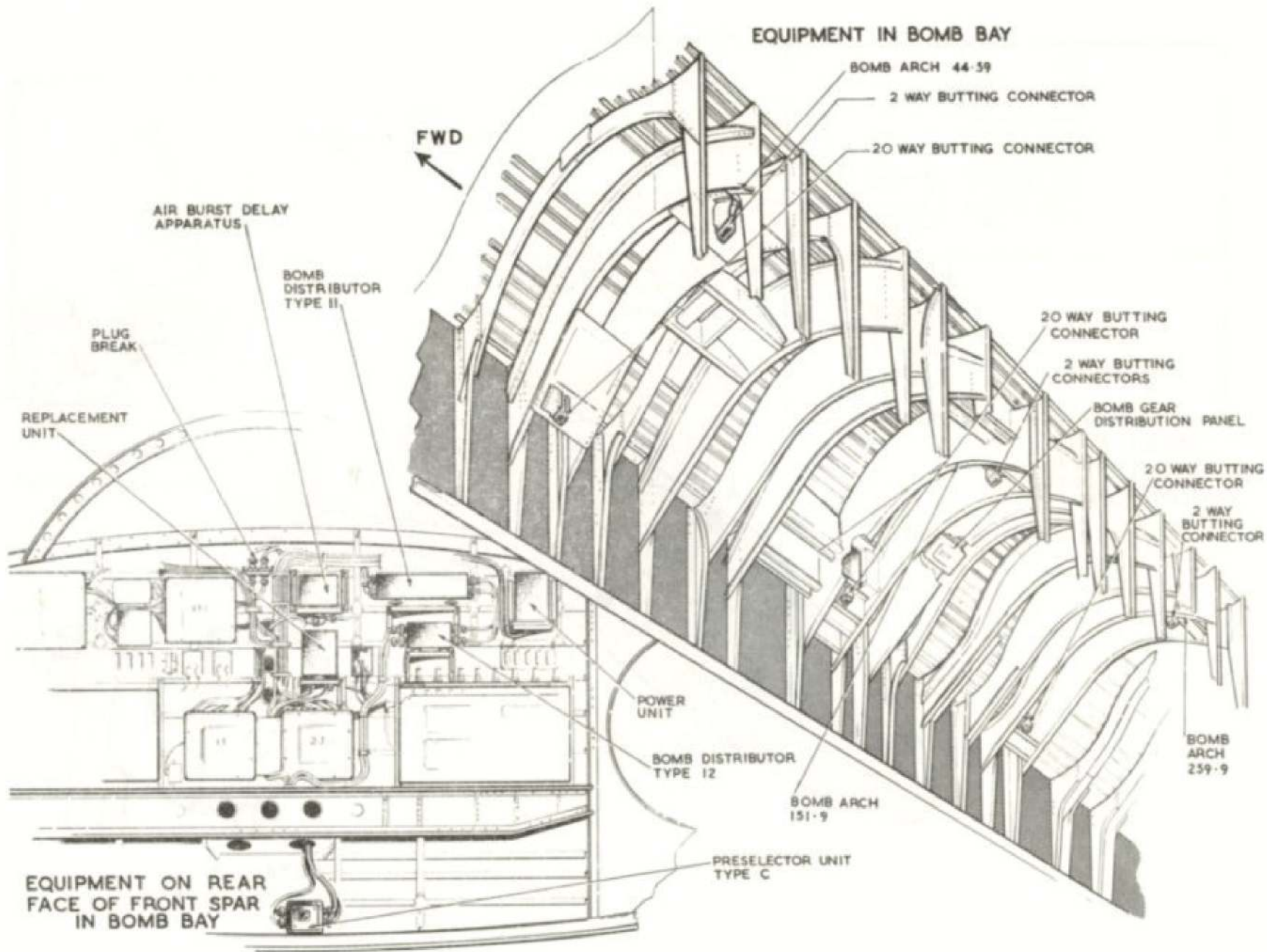


Fig. 5 Bomb bay equipment  
 (← Correction to butting connectors →)  
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## SERVICING

**General**

60. In accordance with A.P.4505A & C, Vol.4, a periodic examination of the terminal points for security and cleanliness is to be carried out. A regular check of the micro switches for external damage or torn bellows and grommets is recommended. Very little servicing of the installation is necessary.

61. In view of the dual functioning of the electro-hydraulic valves used in the bomb doors installation, it is essential that the closest co-operation be maintained between the electrical and airframe tradesmen in order to ensure a high degree of serviceability. This applies to operational tests on the aircraft and bench testing of components. Electrical testing is dealt with in the following paragraphs and system testing of the hydraulics in the bomb doors installation is contained in Book 1, Section 3, Chap.6. Component

testing of electro-hydraulic valves is contained in A.P.1803D.

**Component servicing references**

62. Control switches, see A.P.4343C, Vol.1, Book 1, Sect.1.

Bomb jettison time delay, see A.P.4343X, Vol.1, Book 1, Sect.3.

Magnetic indicator, see A.P.4343E, Vol.1, Book 4, Sect.18.

Micro switches, see A.P.4343C, Vol.1, Book 1, Sect.2.

Relays, see A.P.4343C, Vol.1, Book 2, Sect.3.

All other items in the normal bomb installation will be found in A.P.4343X, Vol.1, Book 1.

**Functional tests**

63. A functional test of the bomb doors control should be carried out at the time required by A.P.4505A & C, Vol.4; the test being carried out as outlined in Book 1, Sect.3, Chap.6. Functional tests of the normal bombing installation are carried out using a bomb release test truck. The truck is equipped with bomb carrier simulators so that a complete check of the system can be made. Full details of the truck and the method of testing are given in A.P.4343V, Vol.1.

**Continuity test**

64. A continuity test of all the control circuit wiring, which will also prove the operation of the micro switches, should be carried out at inspection periods. All valves should be disconnected and test boxes connected at the points of disconnection. The recommended procedure will be found in A.P.4505A & C, Vol.4.

## REMOVAL AND INSTALLATION

**General**

65. Most of the equipment of the Bomb Doors Control and Normal Bomb fuzeing and Release installations are readily accessible and easily removed, therefore no detailed removal instructions are necessary.

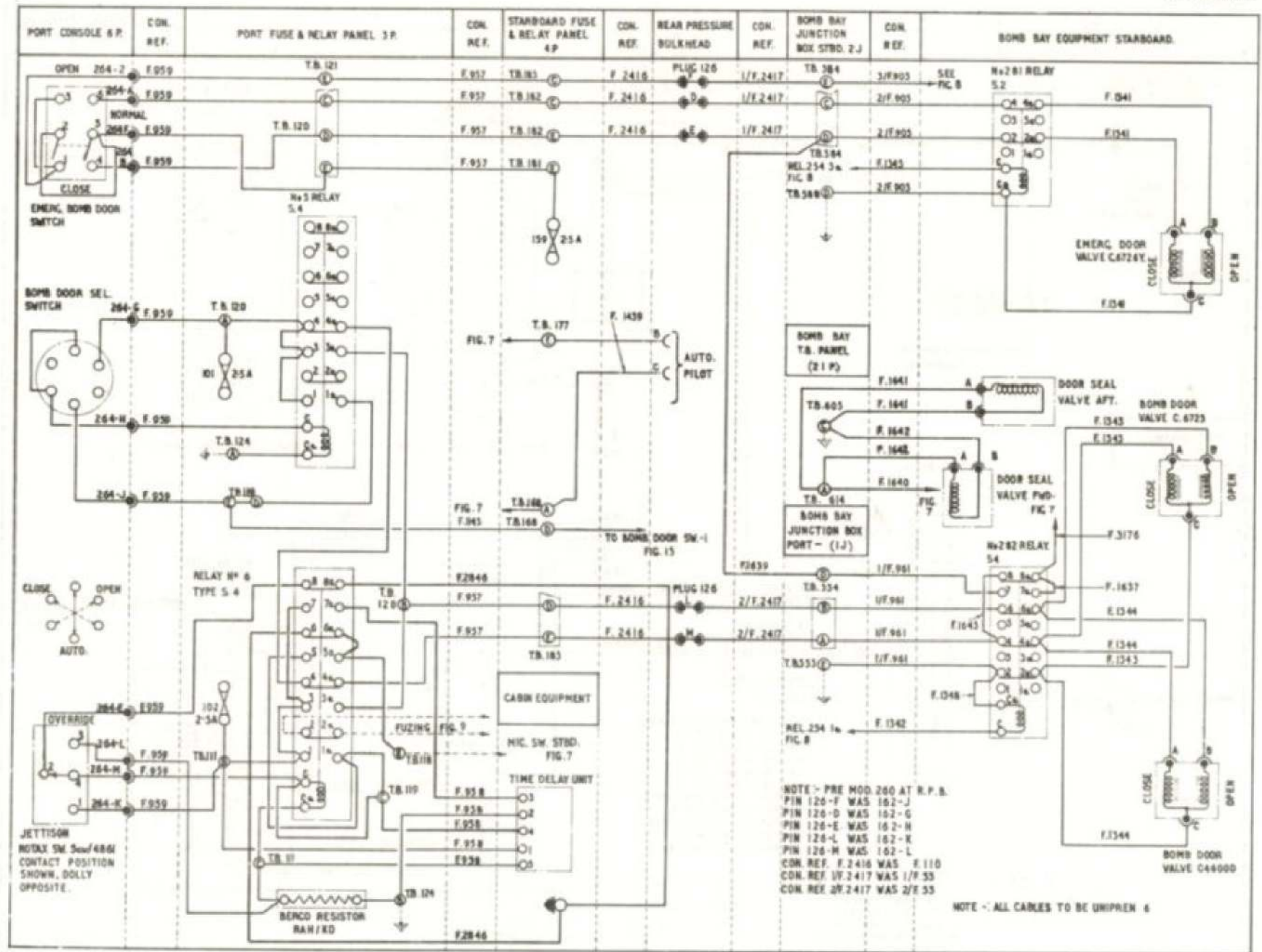


Fig. 6 Bomb doors control

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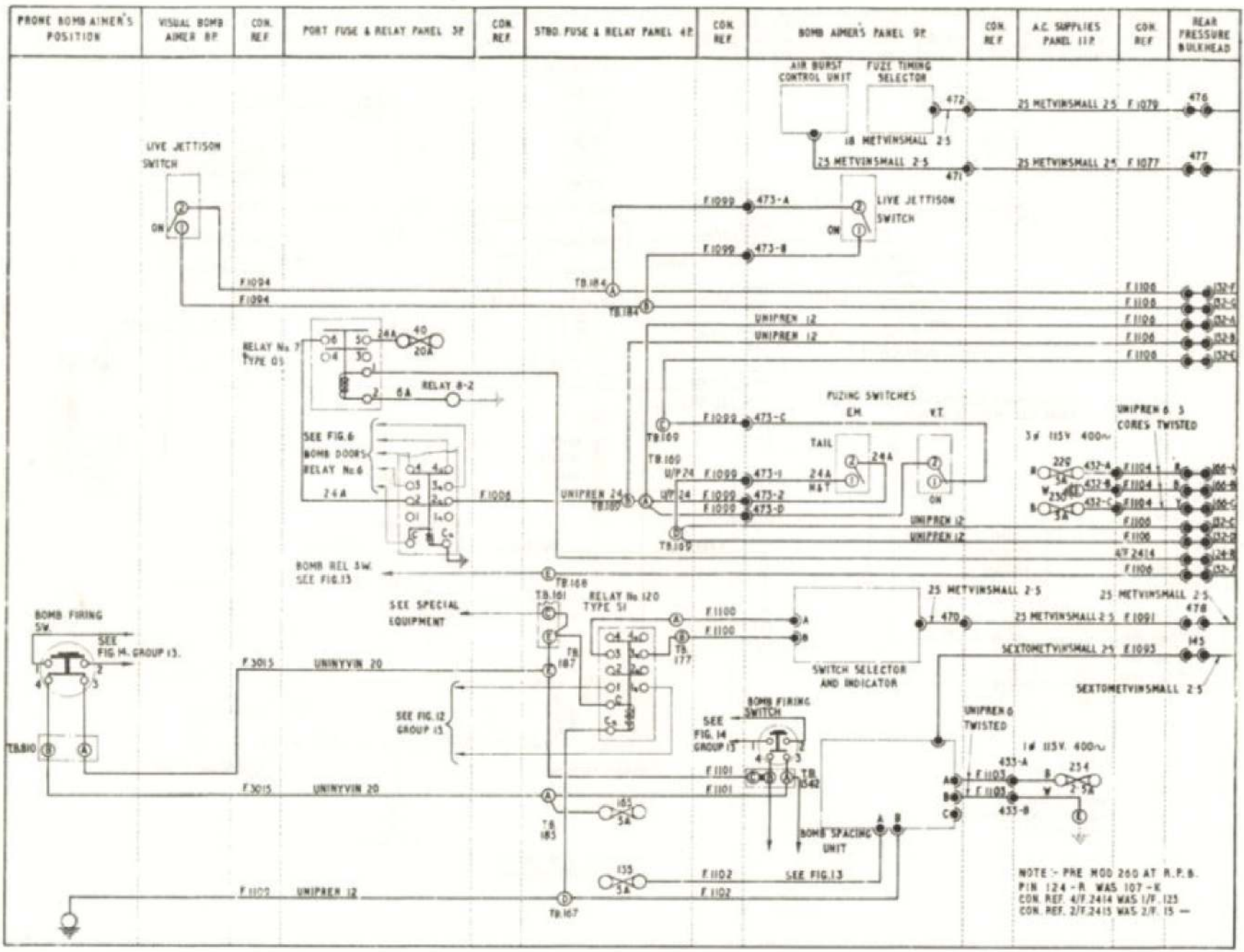


Fig. 9 (1) Bomb fuzing and release

**RESTRICTED**

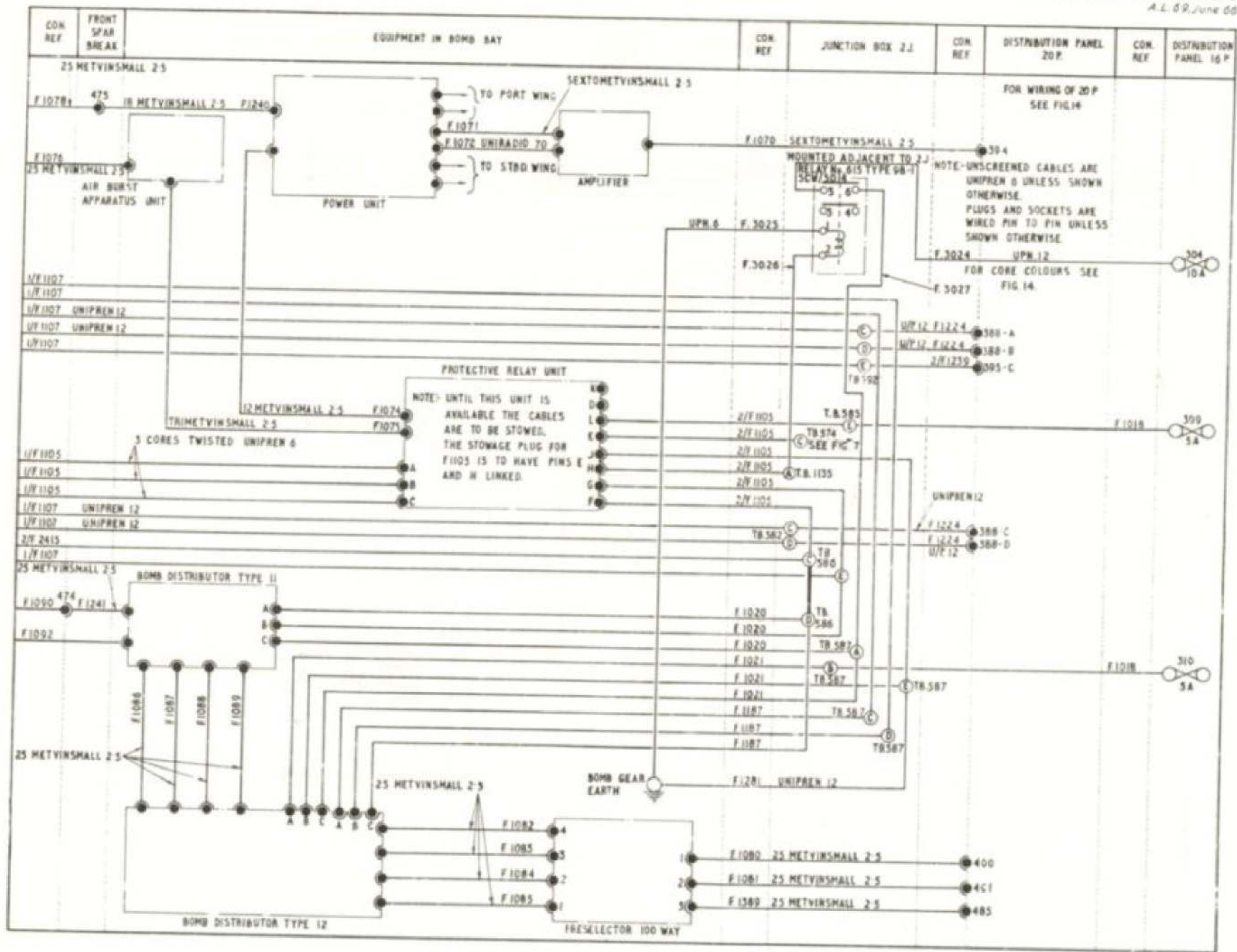


Fig. 9 (2) Bomb fuzing and release

**RESTRICTED**

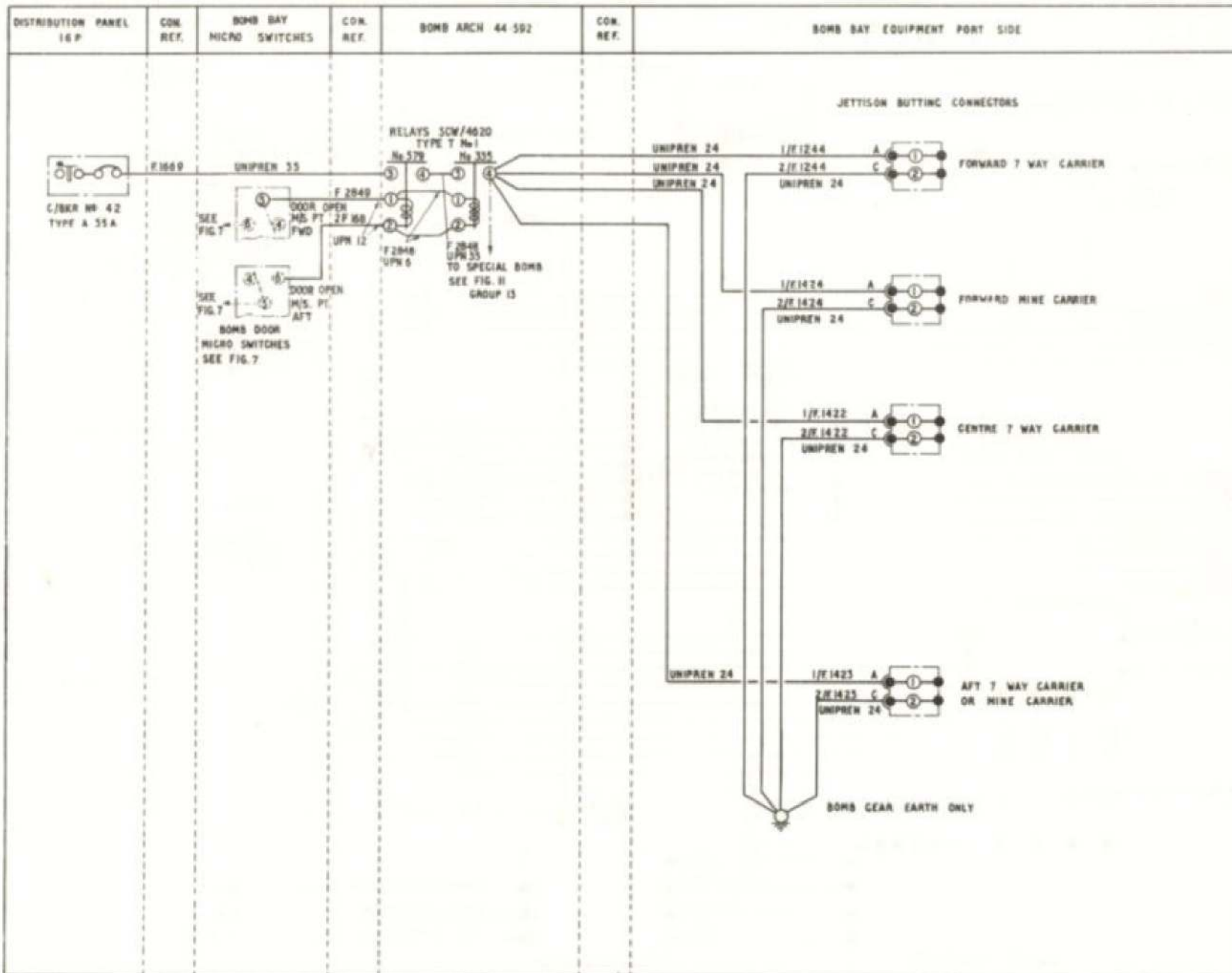


Fig. 10 Bomb jettison connectors

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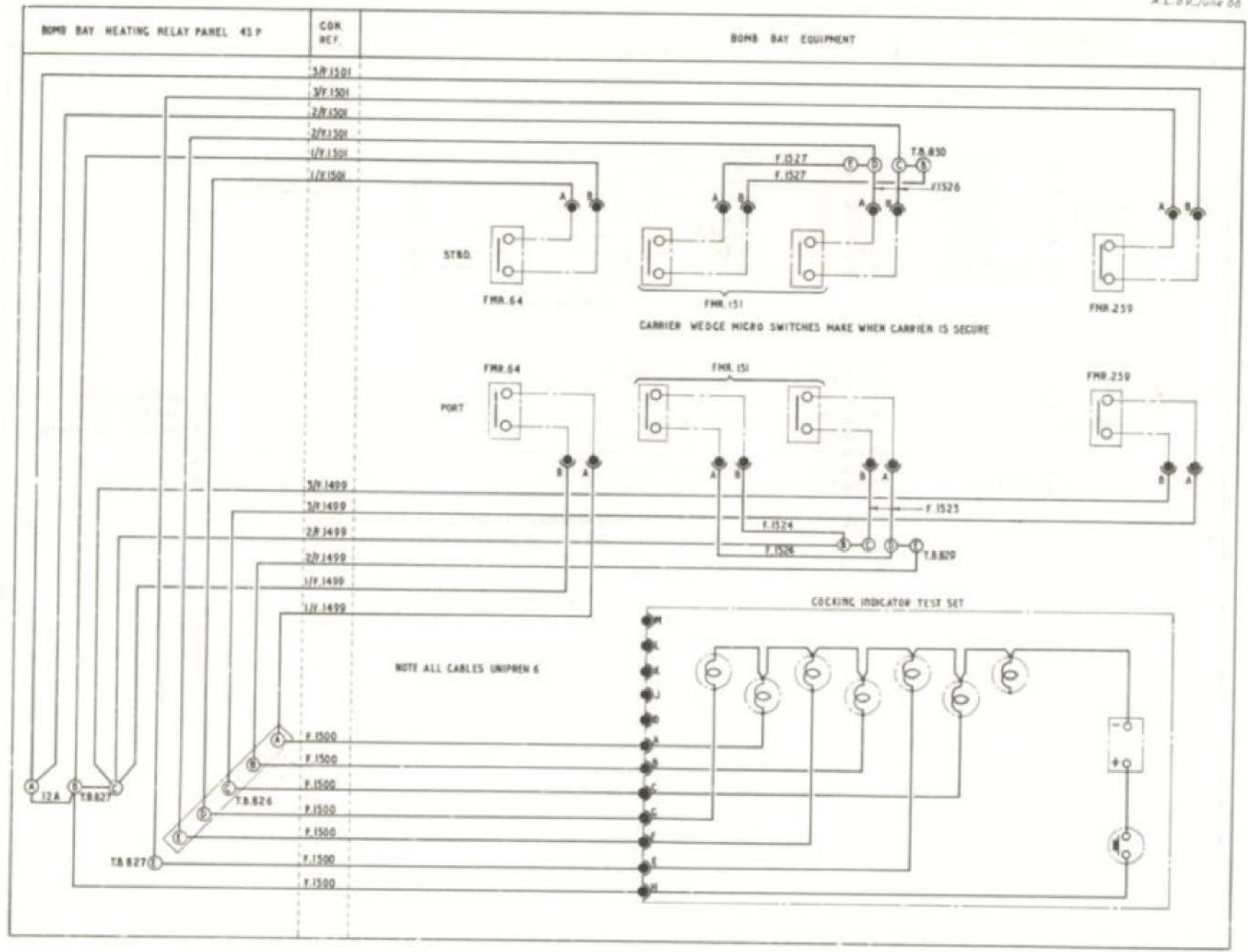


Fig. II Carrier locking indication

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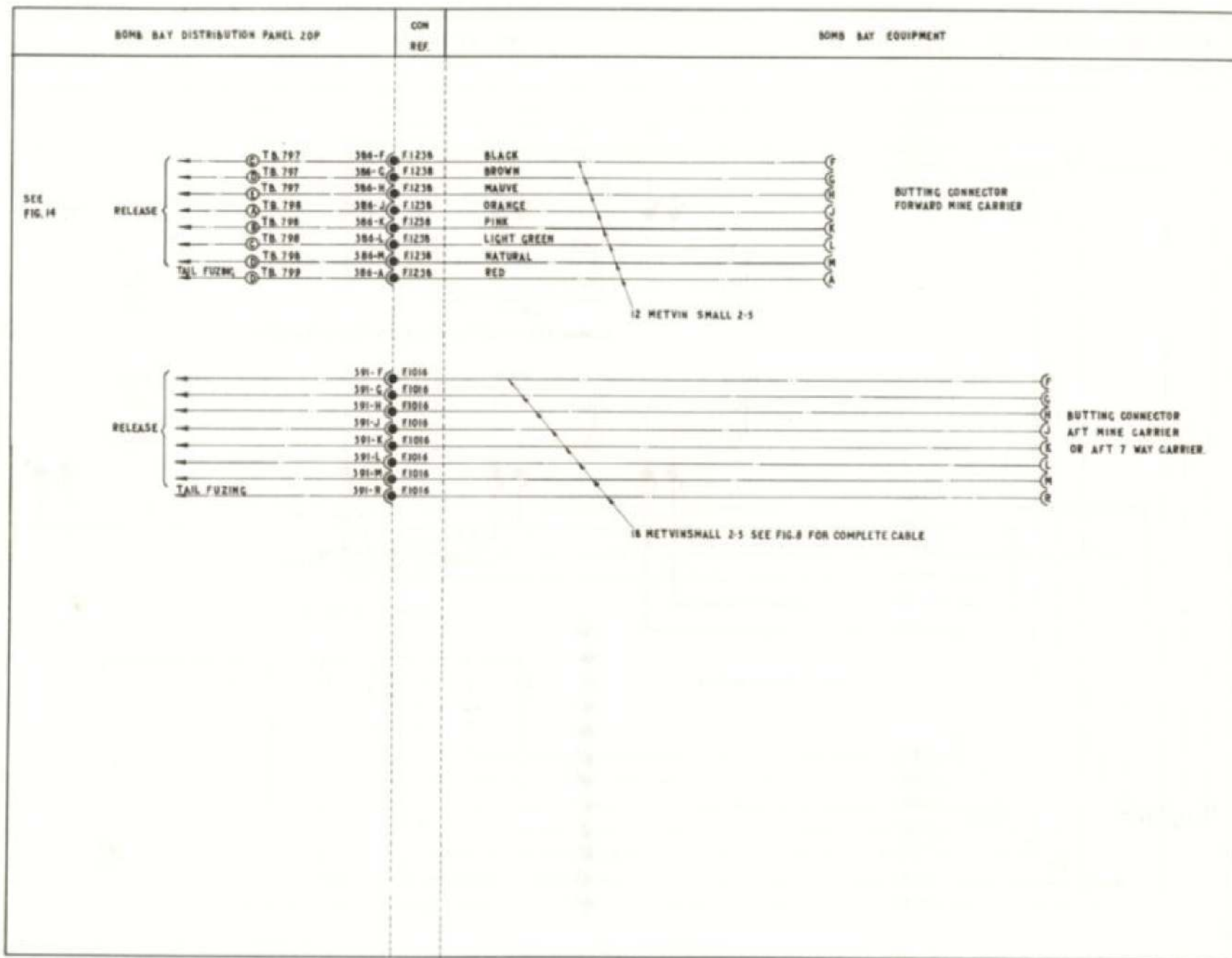
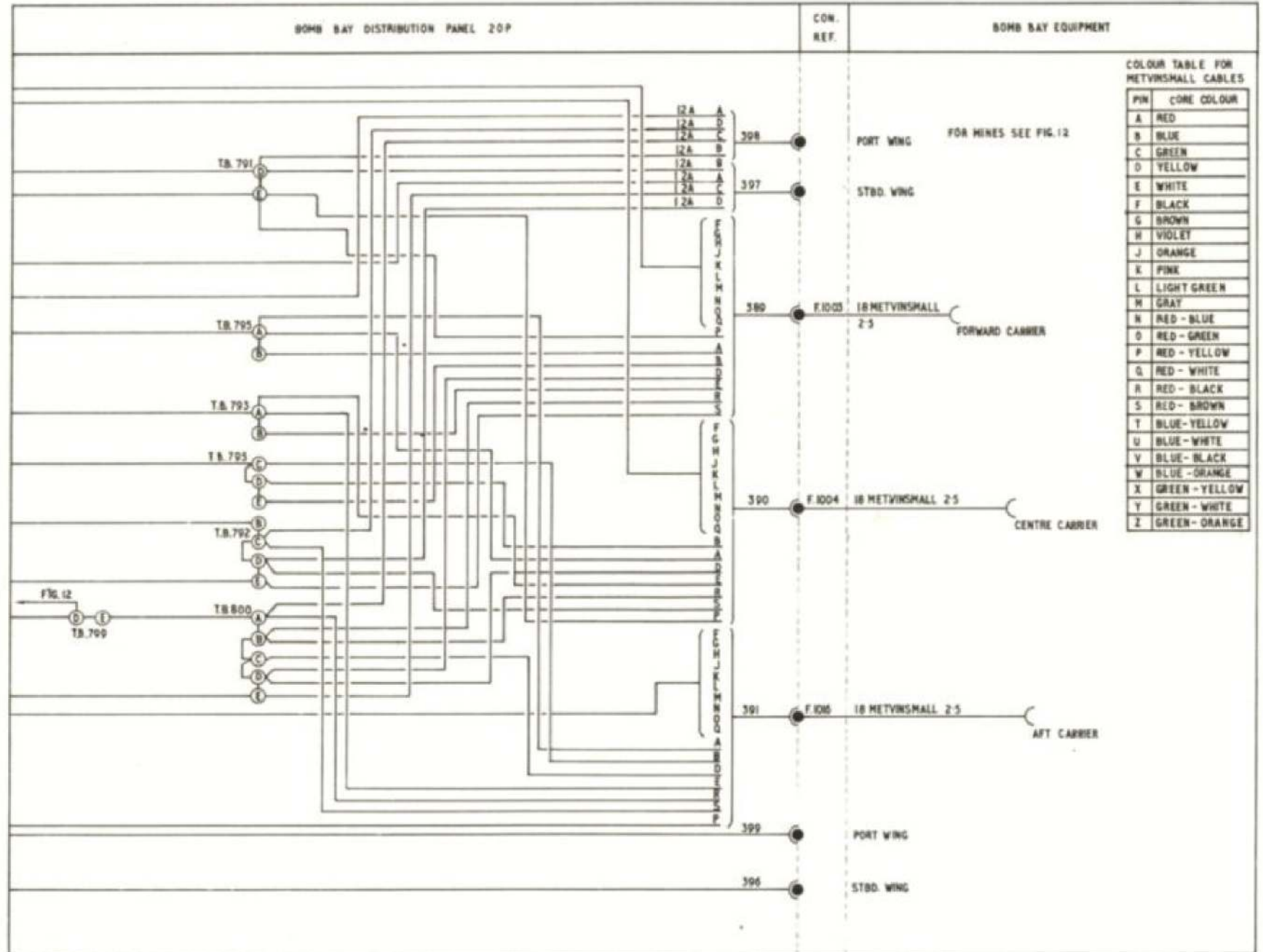


Fig. 12 Mine carriers

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COLOUR TABLE FOR METVNSMALL CABLES

PIN	CORE COLOUR
A	RED
B	BLUE
C	GREEN
D	YELLOW
E	WHITE
F	BLACK
G	BROWN
H	VIOLET
J	ORANGE
K	PINK
L	LIGHT GREEN
M	GRAY
N	RED - BLUE
O	RED - GREEN
P	RED - YELLOW
Q	RED - WHITE
R	RED - BLACK
S	RED - BROWN
T	BLUE - YELLOW
U	BLUE - WHITE
V	BLUE - BLACK
W	BLUE - ORANGE
X	GREEN - YELLOW
Y	GREEN - WHITE
Z	GREEN - ORANGE

89960 <sup>500</sup> 6,66 H.S.A. 1354

Fig. 14 (2) 7-way bomb carriers

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