SECTION 5 - HULL DETAILS

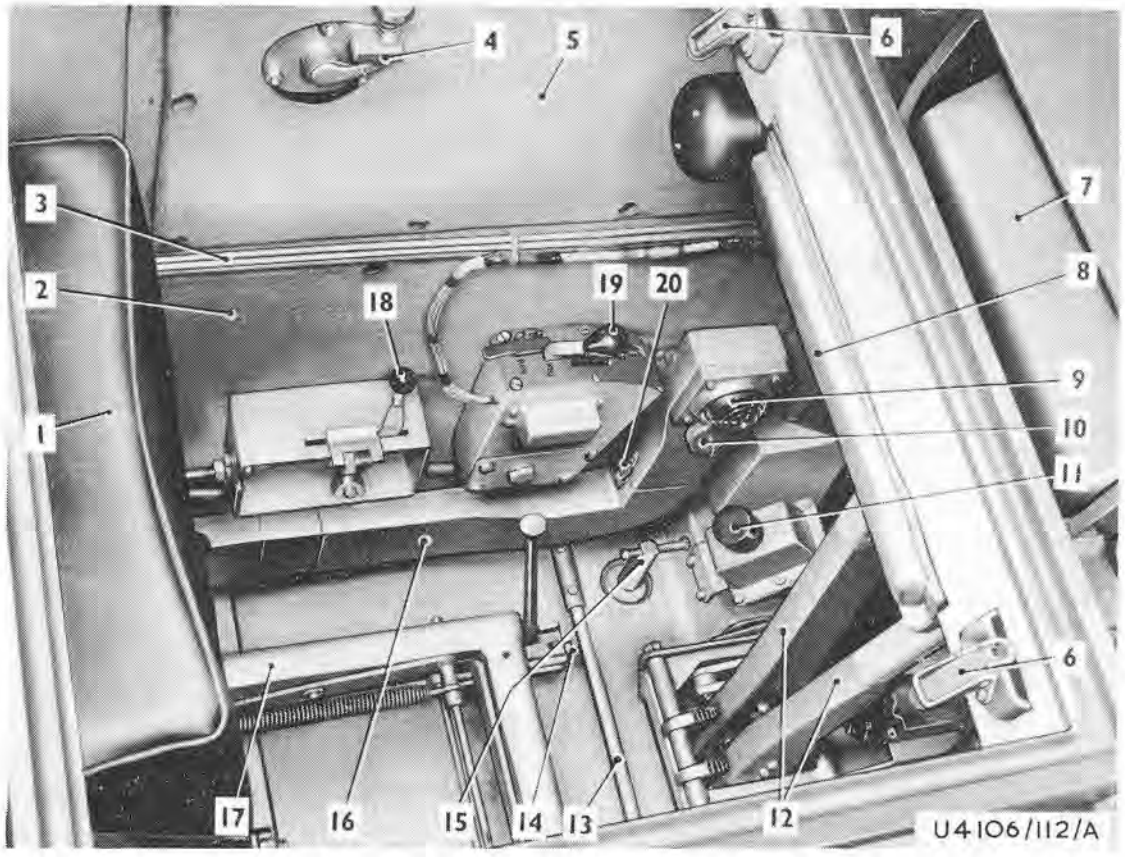
DRIVER'S COMPARTMENT

57. The driver's compartment is situated in the front right corner of the vehicle. The compartment is bounded on the left and rear by the driver's partition plate and on the other two sides by the hull plates.

58. Entry into the compartment is made through a hatch over the driver's position which can be padlocked. A wide angle periscope is provided forward of the hatches for vision when driving in the 'closed down' position.

59. Mounted in the compartment are all the controls and instruments necessary for the driver to operate the vehicle.

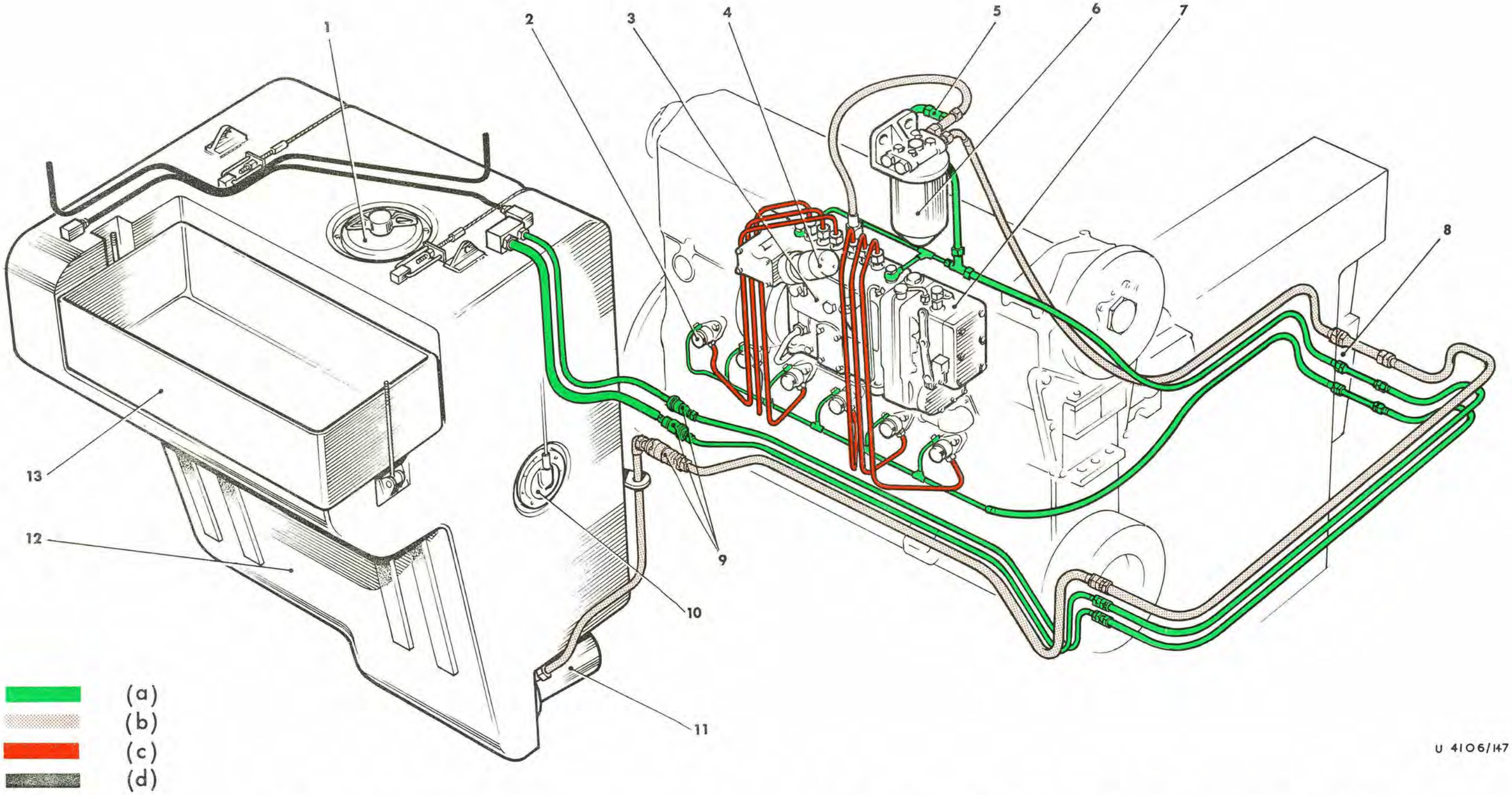
60. A partition plate is fitted with removable access cover plates (Fig 8(2) and (5)) to facilitate the removal of the power pack.



1 Driver's seat upper backrest
2 Partition lower access plate
3 Fuel pipes
4 Accelerator hand control
5 Partition upper access plate
6 Driver's hood toggle clips
7 Driver's periscope
8 Brow pad
9 Diffuser
10 Gas mask adaptor
11 Dipswitch
12 Steering levers
13 Accelerator linkage lower cross-shaft
14 Driver's seat securing bolt
15 Drain plug
16 Ducting
17 Driver's seat frame
18 Engine/transfer gearbox disconnector lever
19 Gear range selector lever
20 Toggle clip

Fig 8 Driver's partition and ducting

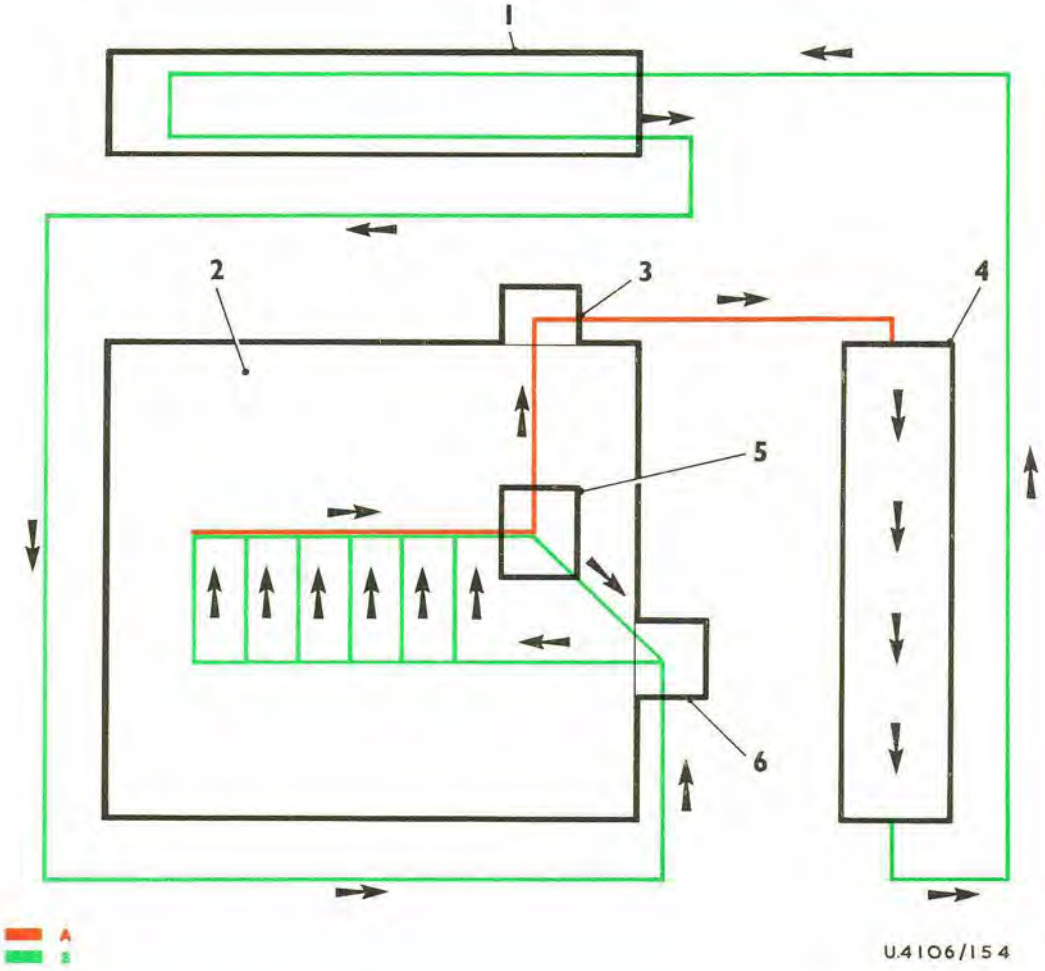
(Amdt.3)



U 4106/147

1 Tank filler cap
2 Injector nozzle
3 Fuel injection pump
4 Fuel cut-off solenoid
5 Relief valve
6 Filter
7 Hydraulic governor
8 Power pack junction panel
9 Quick-release couplings
10 Fuel tank gauge unit
11 Fuel supply pump
12 Fuel tank
13 Battery container
(a) Leak off
(b) Supply pressure
(c) Delivery pressure
(d) Air vent

Fig 35 Fuel system



1 Heat exchanger
2 Cylinder block
3 Hydraulic controller
4 Radiator
5 Thermostat
6 Coolant pump

A Coolant - temperature above thermostat opening temperature
B Coolant - temperature below thermostat opening temperature

Fig 33 Coolant system (diagrammatic)

To top up the system

Warning: *Do not remove the filler cap while the engine is running or before the temperature has fallen below 200 deg F (93 deg C) or severe scalding may result.*

255. (1) Open the power pack access covers.

(2) Unscrew and remove the filler cap (Fig 26(1)).

(3) Add coolant to bring the level to the bottom of the filler elbow.

(4) Replace the filler cap, close and secure the power pack access covers.

To drain the system

256. (1) Open the power pack access covers.

(2) Unscrew and remove the filler cap (1).

SECTION 20 - STARTING

377. The engine starter motor is controlled from the START switch on the engine switchboard in the driver's compartment or from the duplicate switch in the fighting compartment, see para 218.

378. Included in the solenoid circuit is a microswitch which ensures that the gear control lever is in neutral before the starter will function. The switch contacts are closed when the lever is in the neutral position; movement of the lever from meutral operates the switch to open circuit the solenoid.

379. The starter motor is a 6 in. insulated return 4-pole series machine with auxiliary series and shunt (holding-on) windings and having a built-in 2-stage solenoid switch and a built-in thermal switch. It is of the normal C.A.V. axial type designed to give a comparatively slow but positive engagement of the pinion with the engine flywheel before full power is applied.

OPERATION

Starter motor

380. With either engine switch ON and the gear control lever in its neutral position, operation of one of the START switches completes the circuit to the solenoid switch coil. The switch closes to its first contact and completes the armature circuit through the auxiliary series coils and also completes the shunt coil circuit (Fig 51). The armature rotates compara-

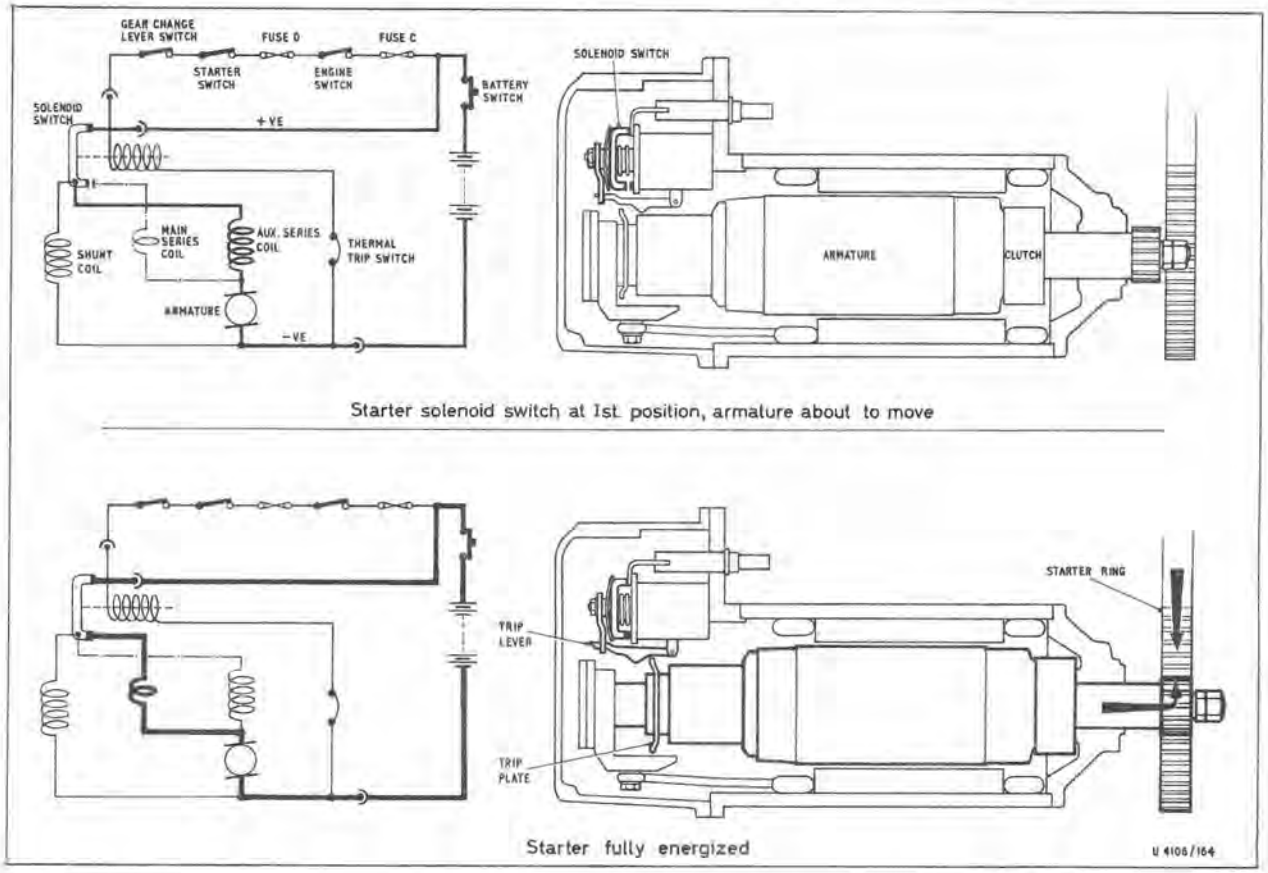
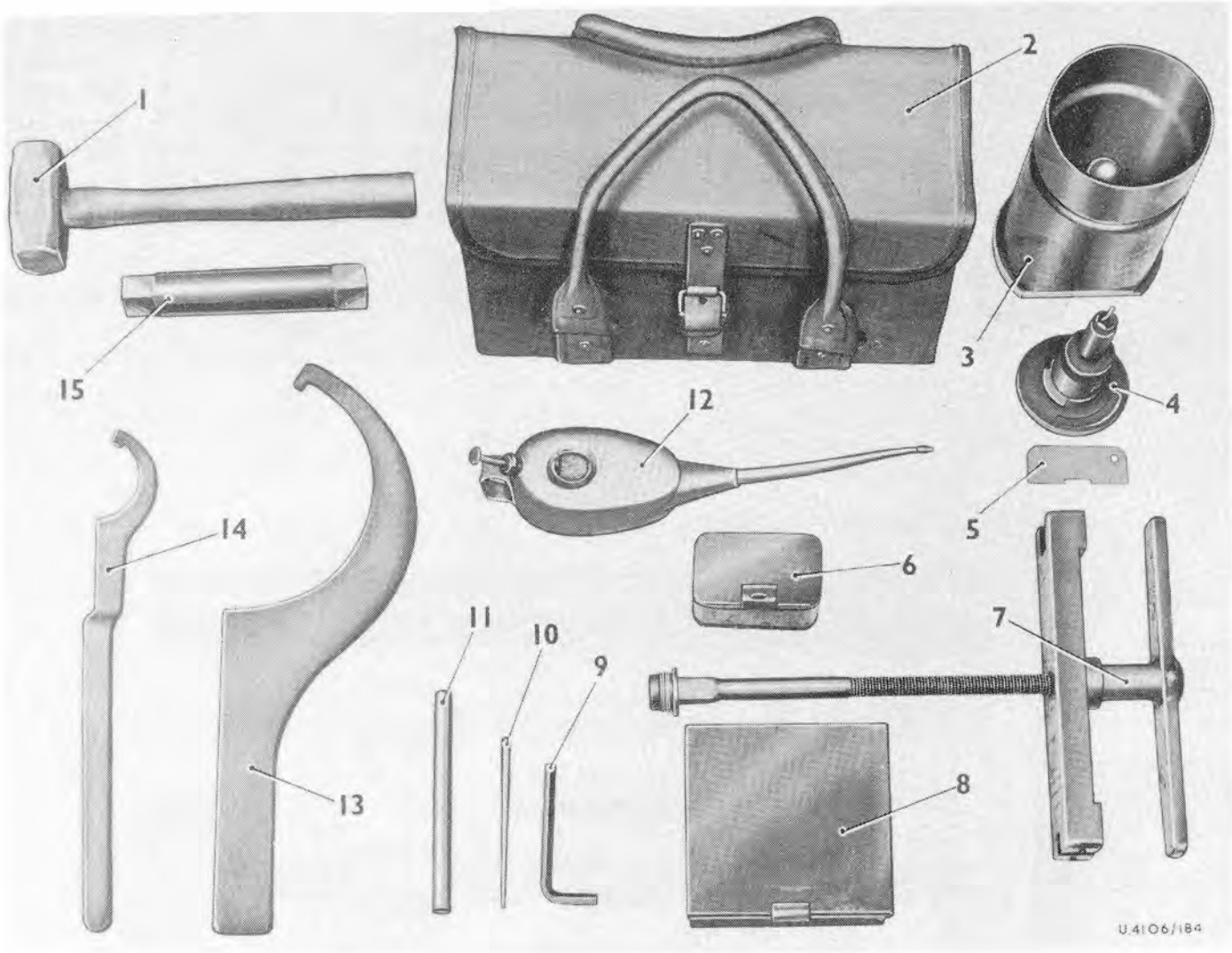


Fig 51 Starter circuit



1 Hammer, 3 lb
2 Tool bag
3 Firing circuit tester
4 Needle, electric firing
5 Gauge, striker protrusion, No. 16 Mk 1
6 Box, spare washers
7 Extractor, jammed cartridge case
8 Box, stowage, vehicular accessories
9 Wrench, hex, 5/16 in. A.F.
10 Drift, No. 18 Mk 1
11 Drift, brass ½ in. x 6 in.
12 Can, lubricating, No. 11 Mk 1
13 Hook spanner, Table 1 Series 7-10/7-50
14 'C' spanner, artillery, No. 34
15 Spanner, tube, 15/16 in. x 1-1/8 in. A.F.

Plate 8 Vehicle and gun tools

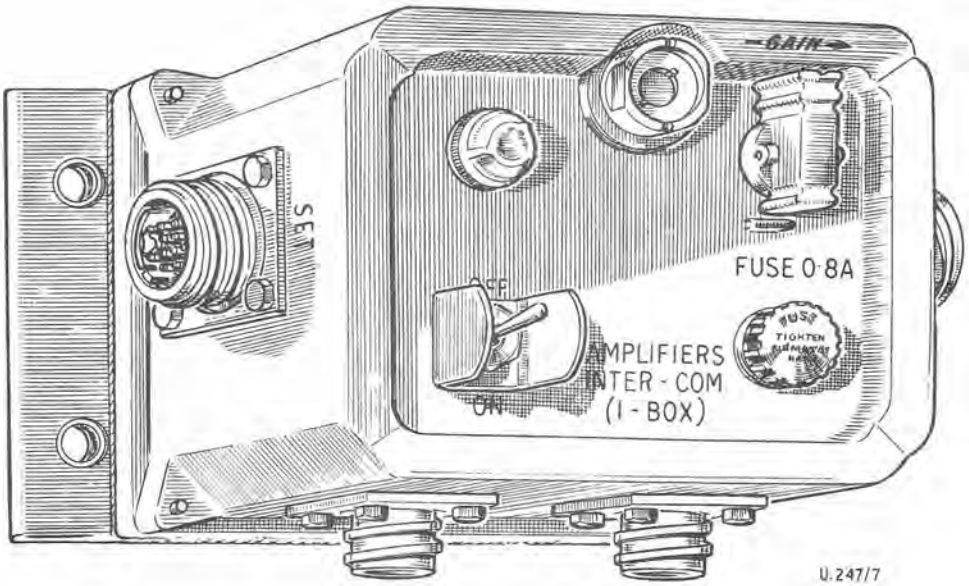


FIG. 7 'I' BOX

'I' BOX

42. Switch on. The indicator lamp lights. Turn the gain control fully clockwise.

SELECTING RADIO CONTROL ON THE RADIO-LINE BOX

43. Switch the radio-line box ON. The indicator lamp lights. Turn the selector switch to SET. The No. 1 can now operate the radio set B48.

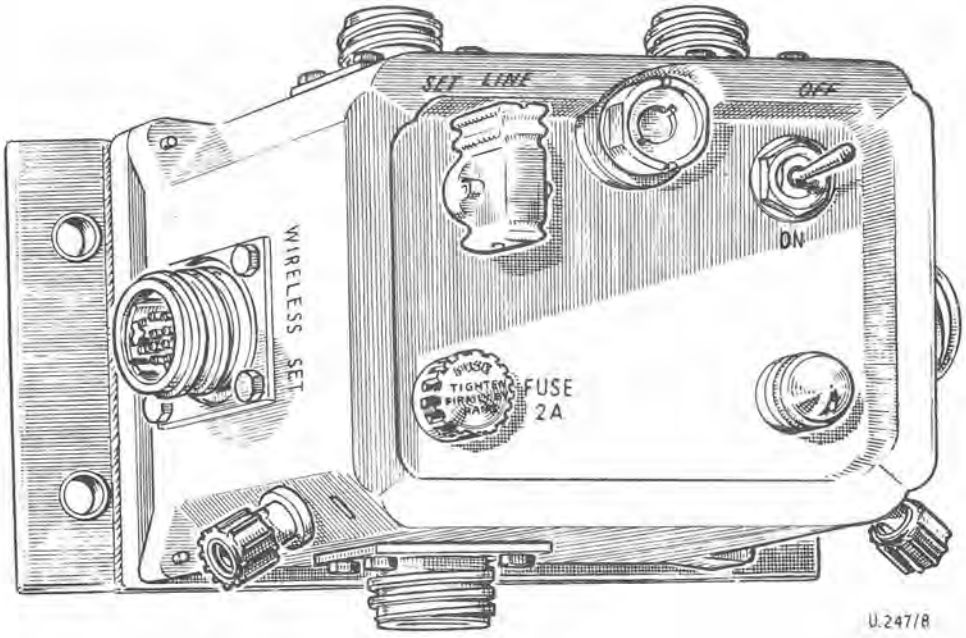


FIG. 8 RADIO-LINE BOX