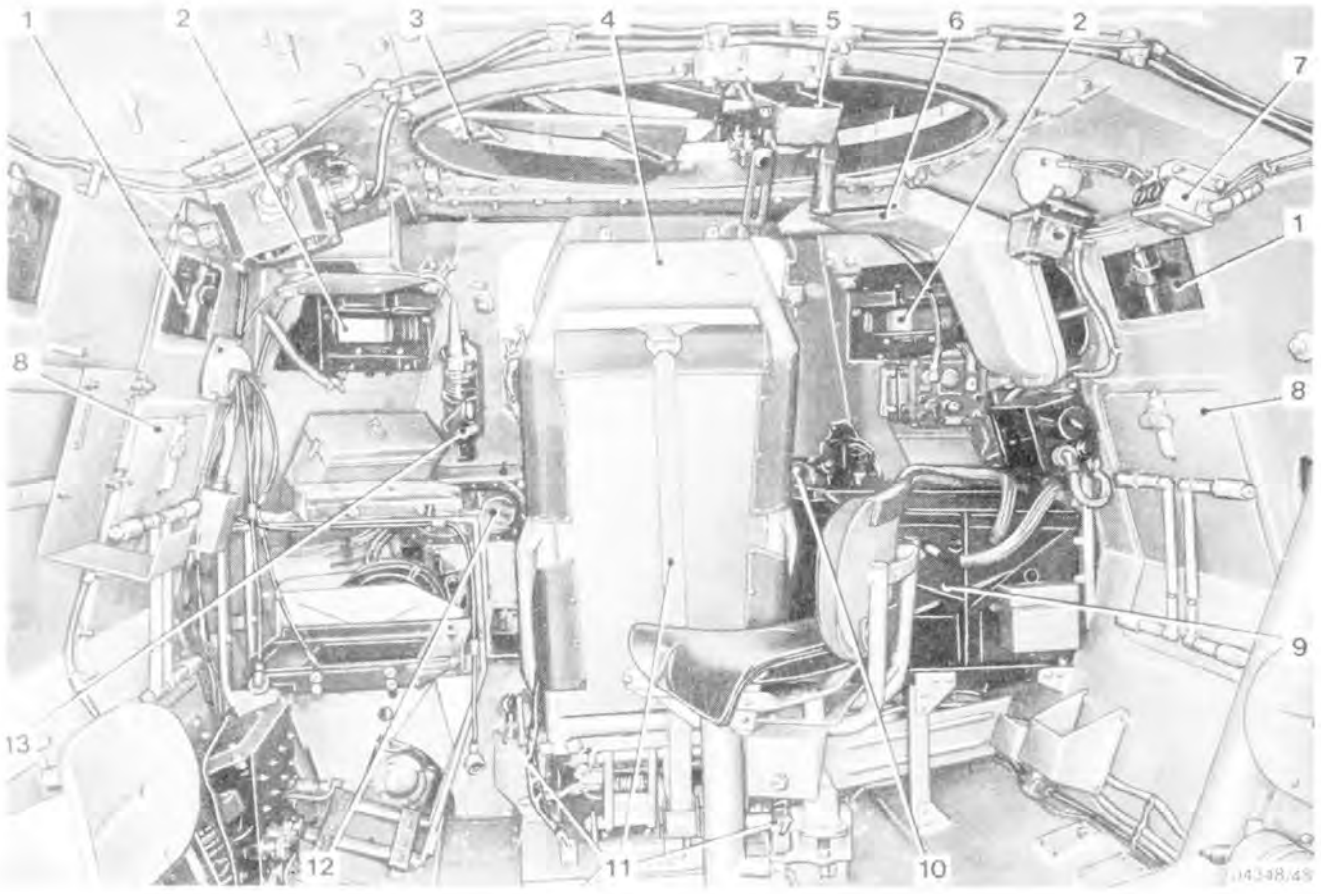


1 Small arms port
2 Driver's side vision block
3 Turret lock
4 Driver's seat, type 30G
5 MG mount
6 Ventilation fan ducting
7 Firing box, smoke grenade dischargers
8 Escape hatch
9 Automotive batteries
10 Driver's switchboard
11 Driver's seat belt
12 Instrument panel
13 Fire extinguisher

Fig 26 APC, front interior view, late Mk 5 and Mk 6 vehicles

To remove and replace an observation port screen

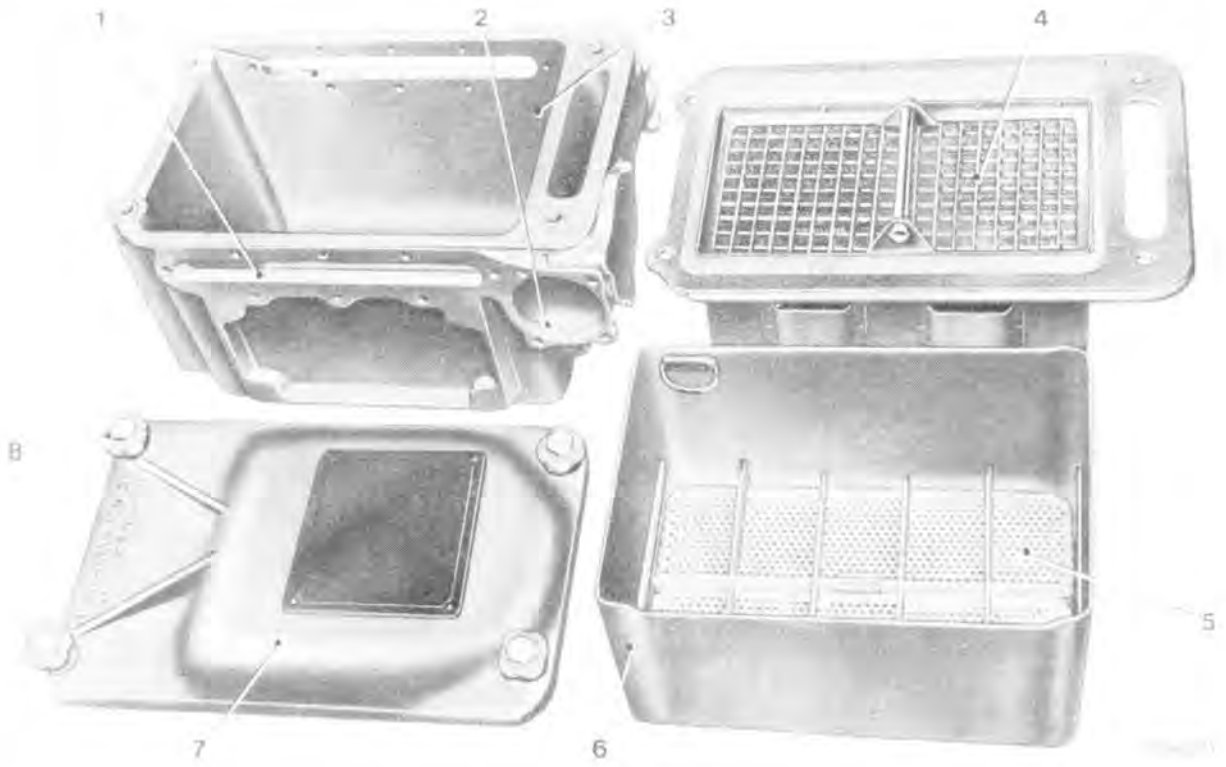
19. The rectangular glass screen is held in position by turncatches, one at each corner. To remove, first support the screen, undo each catch then lift the screen clear. To replace, position the screen in the aperture and secure with the four turncatches.

ESCAPE HATCHES (APCs)

20. The escape hatches (Fig 26(8)) in the hull sides have armour plate covers which can be released and jettisoned in an emergency. The covers are held firmly in position by sliding bolts (Fig 27(4)) and a catch (3), when these are withdrawn (against springs) the cover can be pushed outwards to drop from the vehicle.

To open an escape hatch cover (emergency only)

21. Pull down on the catch handle (2) with one hand, grasp and squeeze together the two release handles (5), push outwards and release the freed cover.



1 Inlet ports *3 Body* *5 Damper* *7 Top cover*
2 Outlet port *4 Element* *6 Oil container* *8 Captive screws*

Fig 55 Engine air cleaner

b. For starting in cold weather:- Pull the control back as in sub-paragraph a. then turn it anti-clockwise and pull it back until it stops again. As soon as the engine starts, return the control to the first position a. Return the control to the fully IN position as soon as the engine will run with it in that position.

c. For starting in sub-zero conditions:- Pull the control back as in sub-paragraphs a. and b. and then turn it clockwise and pull back as far as possible. DO NOT USE FORCE. Return the control to the position as in sub-paragraph b. as soon as the engine starts and to the fully off position as soon as possible. The sub-zero position must only be used under extreme cold conditions since it provides an extremely rich mixture and if used indiscriminately would flood the engine with fuel and prevent easy starting.

Note: *DO NOT use the control when the engine is warm.*
DO NOT use the control for longer than necessary.
DO NOT use the control in intermediate positions.

AIR CLEANERS

146. Two air cleaners (Fig 47(16)) clean the air supply to the carburettor; they are the oil bath type and are located on the bulkhead, one each side in the rear of the engine compartment, the outlets are connected by trunking to the air horn on top of the carburettor. A level of oil in each cleaner ensures the correct amount of 'wetting' of the filter element (Fig 55(4)). The oil is contained in a separate container, a specially-constructed damper (5) seated in the base of the container (6) prevents the oil surging when the vehicle is on the move. The filters have covers (7) secured by hand screws (8) to permit ease of access for checking and servicing, gaskets are fitted between jointing surfaces to exclude dust and moisture.

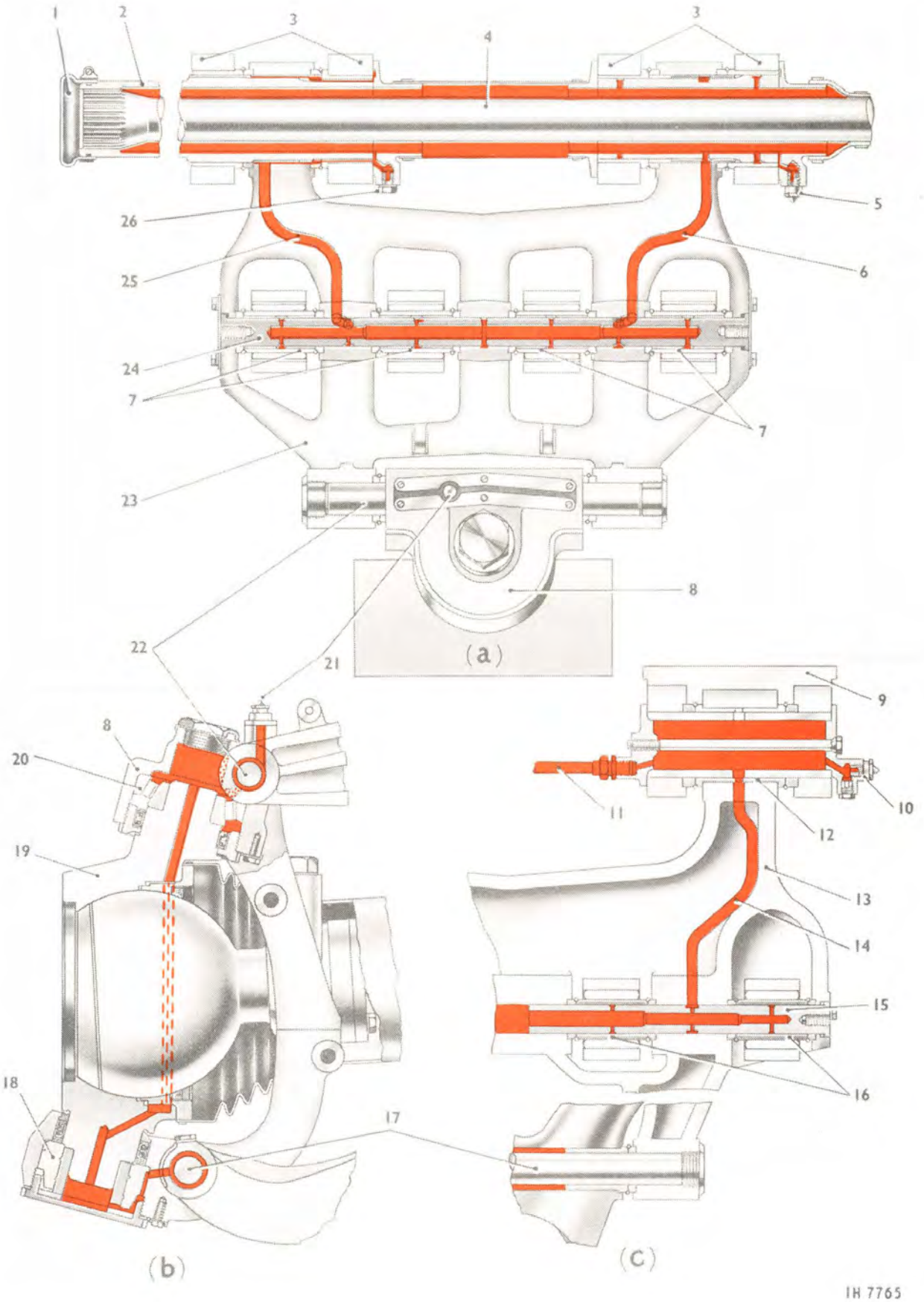


Fig 79 Suspension unit lubrication system

FAULTS	*TESTS AND PROBABLE REMEDIES*
MAIN INDICATOR FLICKERS AT NORMAL ENGINE SPEED	
Probable cause	
a. Generator drive slipping	Check generator drive and note rotation of pulley when engine is being turned over
b. Faulty connections in charging circuit	Examine all connections, as far as possible, for cleanliness and security
c. Faulty generator, generator panel, or distribution panel	REPORT
SLIPPING DRIVE WHEN VEHICLE IS OPERATING	
Probable cause	
a. Gearbox brake bands slipping	Test by engaging other gears. Stop the engine, select the faulty gear and pump the gear change pedal, with full depressions and releases, 20 or 30 times. If the gear still slips, avoid using it and report at the earliest opportunity.
Warning: **DO NOT** *DRIVE THE VEHICLE IF ANY UNUSUAL NOISES OR VIBRATIONS ARE NOTED IN THE GEARBOX*	
b. Fluid coupling fluid level too low	Check the fluid level. If the fluid level is low, top-up to the correct level. Check the coupling to locate the leakage. Report at the first opportunity.
NO DRIVE WHEN GEARBOX AND TRANSFER BOX ENGAGED	
Probable cause	
a. Faulty gear selector mechanism	Check as far as possible the linkage from the gear selector lever to the gearbox. Examine for lost motion in linkage.
b. Faulty transfer box selector mechanism	Check as far as possible the linkage from the control lever to the transfer box. Examine for lost motion in linkage
If the fault is not located by the above checks, REPORT.	
GEAR CHANGE PEDAL HARD TO DEPRESS AND FLIES RIGHT BACK	
Probable cause	
a. If fault occurs repeatedly in one gear, faulty gear engagement in the gearbox	Check by engaging other gears. Avoid using the faulty gear and report at the earliest opportunity.
b. If fault occurs occasionally in all gears, incorrect adjustment of gear change controls or incorrect operation of pedal	Check that there is free travel on the pedal in all gears and that pedal does not contact hull plate when fully depressed. Make sure that pedal is being pushed right down when changing gear.
If the fault still persists, REPORT.	