

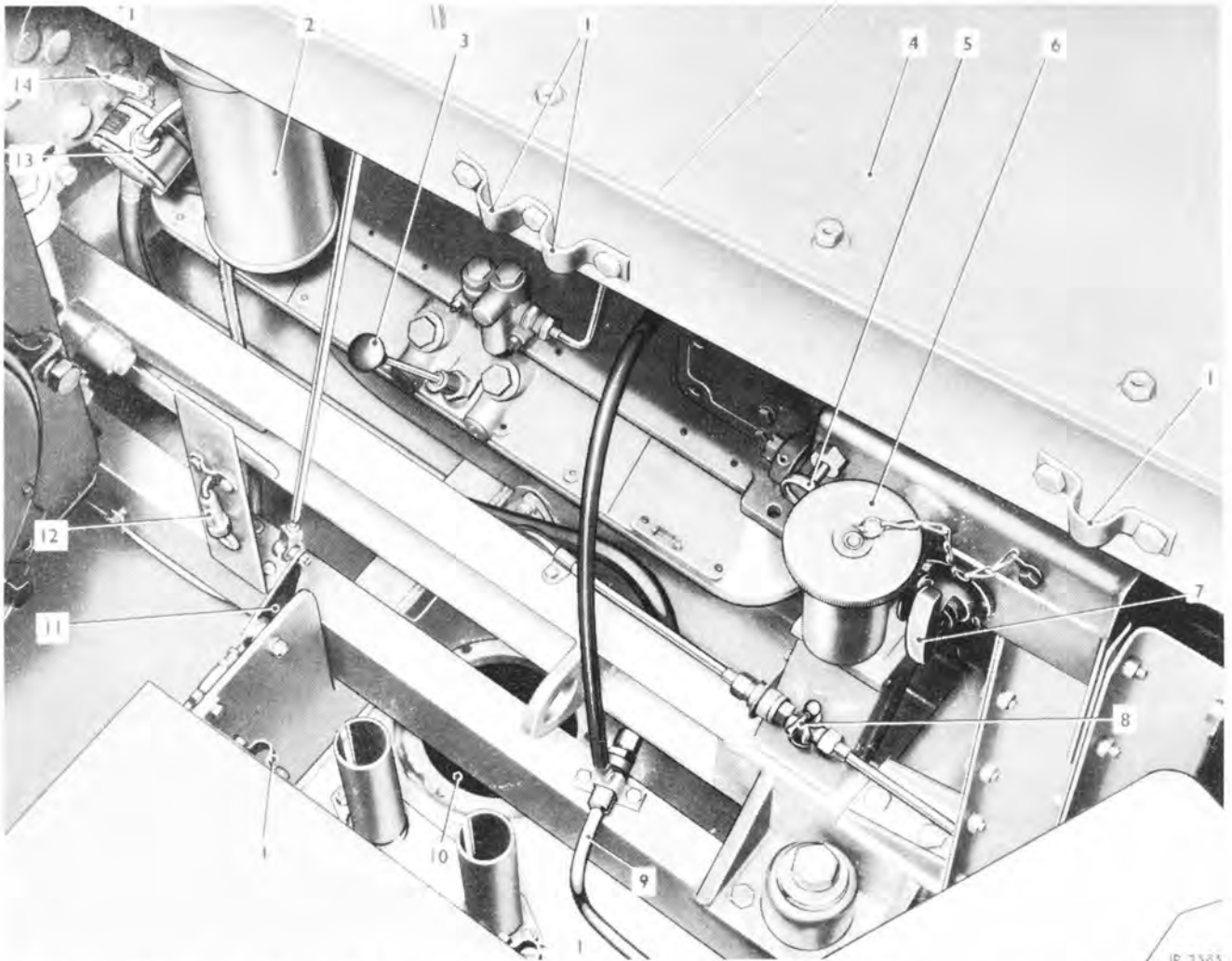
## KIGASS PUMP

24. The Kigass pump (Fig 7(7)) is a cold starting device for use in extreme conditions. Fuel is drawn from the fuel tank and pumped through a non-return valve to atomizers in the inlet manifold. Through the atomizers it is injected into the manifold as a very fine spray.

### To operate

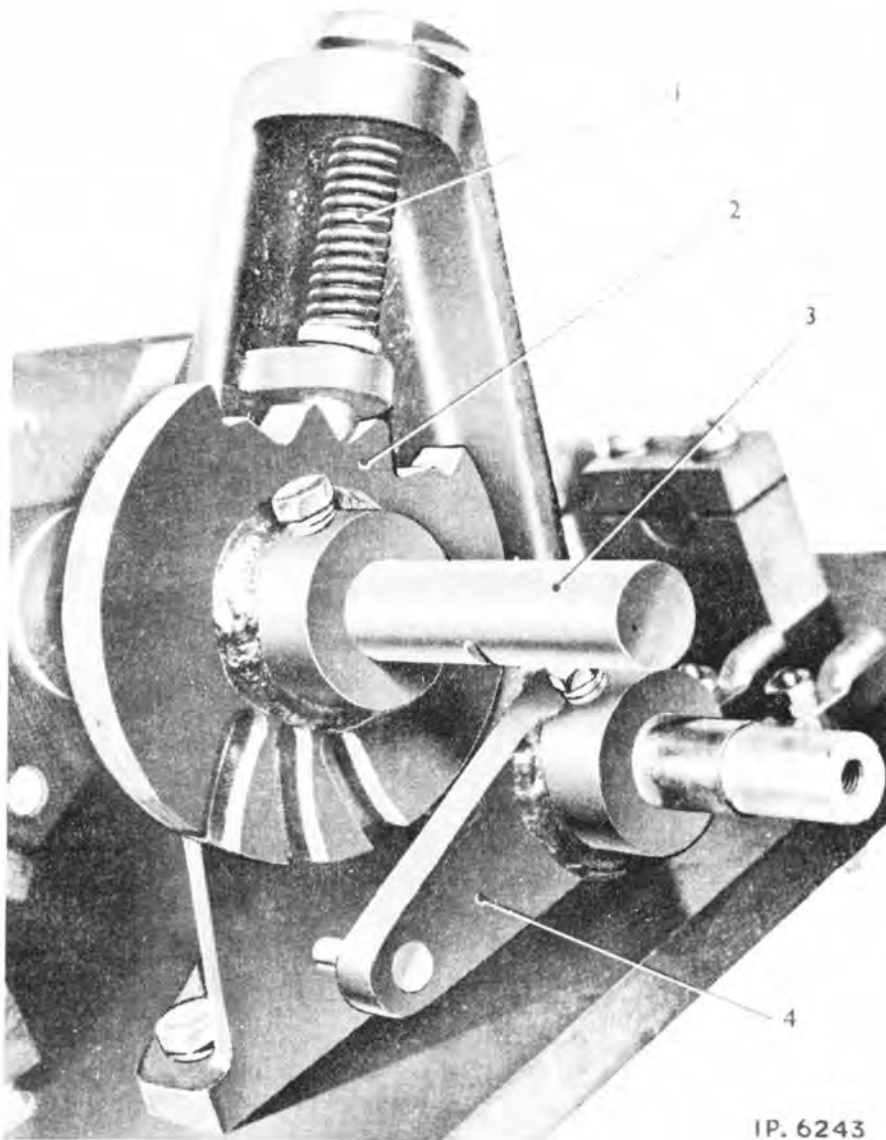
25. Unscrew the operating handle of the pump by turning anticlockwise, withdraw the handle and pump three times. This must be done immediately before depressing the starter switch.

After using, screw in the operating handle of the pump tightly.



- |                                       |                                       |                             |
|---------------------------------------|---------------------------------------|-----------------------------|
| 1 Saddle clips for crew seats         | 6 Radiator filler                     | 11 Throttle control linkage |
| 2 Engine oil filter                   | 7 Kigass pump                         | 12 Engine guard catch       |
| 3 Dipstick                            | 8 Radiator drain cock                 | 13 Fuel pump                |
| 4 Rope guard                          | 9 Fuel pipe                           | 14 Fuel pump priming lever  |
| 5 Carburetter starting device control | 10 Access plate engine oil drain plug |                             |

Fig 7 Left side of winch engine, guard removed



- 1 Drum locating plunger
- 2 Drum disc
- 3 Drum spindle
- 4 Interlock

Fig 23 Reverser interlock mechanism

### CONTACTOR PANEL

130. The panel (Fig 24) houses the main contactor (2), generator shunt field contactor (4), generator shunt field weakening contactor (3), rope protection relay (1), generator field resistors (7) and (8) (para 113) and an ammeter shunt.

### CONTACTORS

131. The three contactors are of a similar pattern, the main contactor is rated at 150A and the other two at 75A. They are of normal construction with blow-out coils fitted in asbestos based cheeks. These coils are connected in series with the contactor and help to prevent arcing across the contacts.

General electrical equipment

**Routine adjustments and servicing**

245. Proceed as for taillight (para 243) but do not release the mounting bracket.

**SPADELIGHT**

246. The spadelight is provided to give warning of the overhanging recovery equipment. It consists of a taillight (para 242) fitted in a fabricated tubular bracket which, when required, is bolted to the right side of the spade (Fig 49(9)). It is supplied with 8 ft 3 in of 3 core TRS cable complete with a rubber shrouded 3 pin plug; only two cores of the cable are used.

The socket (3) for the supply is located on the front of the main guide pulley supporting bracket.

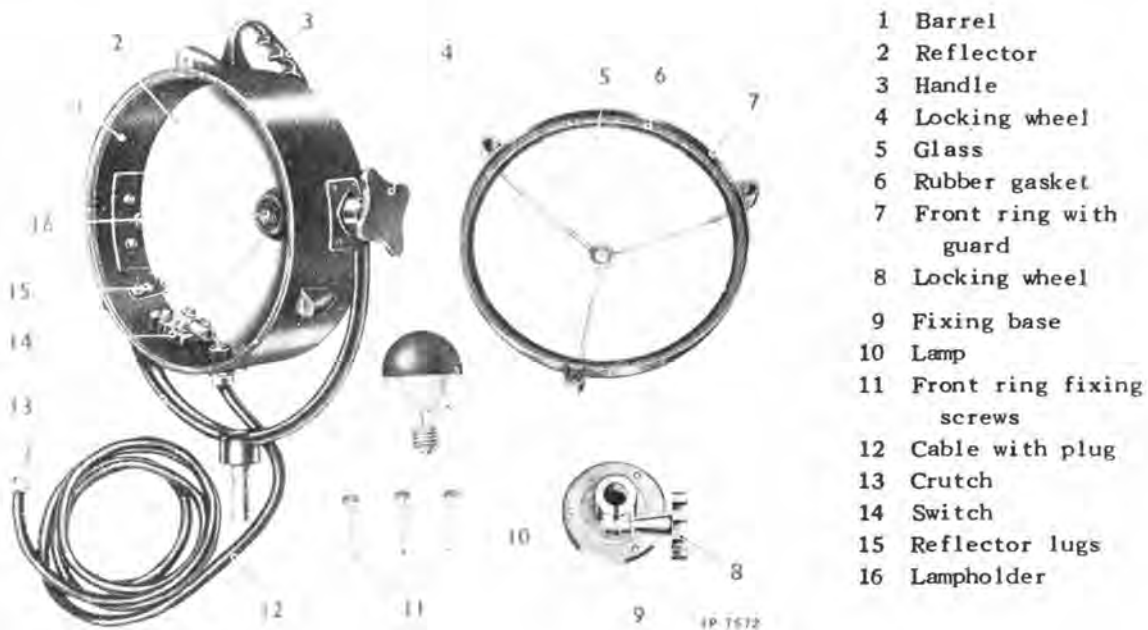
**Routine adjustments and servicing**

247. Proceed as for taillight (para 243).

**SEARCHLIGHT, FRANCIS, TYPE SB/CFD**

248. The searchlight (Fig 38) is a stem-mounted unit which may readily be turned to shine the light in any direction, a handle being provided at the top of the light.

Incorporated in the light is a crutch (13) in which the barrel (1) of the light may be pivoted for up or down projection of the beam; a wheel (4) is provided to lock the light in position. The stem of the crutch locates and



**Fig 38 Searchlight**

## *Operating instructions*

### WINCH COMPARTMENT VENTILATION

336. The heated air blown through the main engine louvres by the B80 engine fan can recirculate in the winch compartment if the hatch in the rear wall is opened.

337. To raise the temperature in the winch compartment, close all hatches except the one situated on the rear wall of the compartment.

338. To lower the temperature of the compartment, close the hatch in the rear wall and open the remainder.

### SHALLOW FORDING INSTRUCTIONS - DEPTH 4 FEET

#### PREPARATION

339. (1) Ensure all hull drain plugs and access cover joints are undamaged and serviceable and that the plugs and plates are tightly secured.
- (2) Ensure that the fording plate joints are serviceable, and that the fording plate securing bolts are tightened down evenly.

#### DRIVING IN SHALLOW WATER

340. Engage a low gear and keep the engine revolutions steady so that the bow wave in front of the vehicle is reduced to a minimum.

#### POST SHALLOW FORD MAINTENANCE

341. At the earliest opportunity after shallow fording:-

- (1) Drain off water that has entered the hull by removing the drain plugs and inclining the vehicle.
- (2) Check the final drives and shock absorber reservoirs for water entry. Drain and refill where necessary.
- (3) Carry out a complete servicing of the vehicle, paying special attention to the axle arm pivots, road wheel bearings and final drive labyrinths.

342. If there has been a substantial water entry into the hull lubricate the clutch release bearing and also all controls and linkages.

(Amdt.7)

- (vi) Check the inlet valve clearance and reset if necessary (0.010 in. with engine cold), (L.A.D.).
- (vii) Slightly oil winch engine contact breaker point pivots (one drop of OMD 110).
- (viii) Lubricate fan belt tensioner (1 nipple - LG 320).
- (ix) Clean the contacts of the winch contactor panel and the contact segments of the winch reverser. (electrician or veh.mech.II).

Task "K" - Every 200 hours running or 6 months whichever is reached first

1. Winch

- (i) Change the winch gearbox oil (OC 600).
- (ii) Change the main drive chaincase oil (OC 600).
- (iii) Change the pay-on chaincase oil (OC 600).

Task "L" - Every 250 hours running

1. Winch engine

- (i) Check the valve clearance and reset, if necessary, with engine cold.  
Inlet 0.010 in. Exhaust 0.015 in. (L.A.D.).
- (ii) Check fan belt tension, there should be 1 in. movement between the crankshaft pulley and the coolant pump (L.A.D.).
- (iii) Check the cylinder head nuts for tightness (L.A.D.).

Periodic

- 1. Track adjuster screw (2 nipples - LG 320) grease every time track is released.

REPORT FAULTS