The Chieftain main battle tank entered service in 1963. It carried a crew of 4 – the driver in the hull, and the commander, gunner and loader situated in the turret. The main armament was a 120mm rifled gun, a 7.62mm GPMG and a separate, dismountable, 7.62mm GPMG used for anti-aircraft and general defence. A .50in ranging machine gun is mounted coaxially. The Chieftain was powered by a Leyland L60 19 litre 6 cylinder vertically opposed multi-fuel engine driving an electro-hydraulic gearbox.

The Chieftain saw service with various countries including Iran, Iraq, Jordan, Kuwait and UK.

The User Handbook is in English and comprises 396 pages covering all aspects of operation, maintenance and fault diagnosis. There are over 103 colour and monochrome illustrations including stowage diagrams.

Contents
1. Introduction and Data
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3. Air Conditioning System
4. Turret Traverse Controls
5. Fire Fighting Equipment
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7. Fuel and Fuel Injection Systems
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10. Batteries, Lighting, Starting and Accessories
11. Clutch and Gearbox
12. Steering
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15. Sprockets, Tracks and Track Adjustment
16. Suspension and Shock Absorbers
17. Starting and Stopping Procedure
18. Towing
19. Tools, Spares and Stowage
Chap. 1 - Sect. 3
Hull and turret details

Fig 23 Chieftain Mk 2, plan view rear right

1 Transmission compartment covers
2 Filter housing
3 Battery access door
4 Metadyne access cover
5 Commander's access door
6 Cupola
7 Gunner's sight
8 Smoke grenade discharge
9 Fire extinguisher
10 Cable reel
11 Main engine air cleaner inlet
12 Fuel filler cover
13 Gun crutch
14 Infantry telephone

To replace the driver's seat

87B. (1) Ensure seat guides are fitted to seat.
(2) Replace in the reverse order of removal, guiding seat backrest through driver's hatch first.
(3) Locate rear end of each seat guide correctly then fit securing bolts (½ in. A.F. spanner).
(4) Check operation of seat (para 15 - 20).

ENGINE AND TRANSMISSION COVERS

88. The engine and transmission cover hinges and catches should be lubricated, using an oil can.

COMMANDER'S SEAT

To check and top up the reservoir

89. Equipment required:

Oil OM-13
Clean cloth

(Amdt. 3)
Fig 54 Generating unit engine oil circuit (diagrammatic)

THE AIR CLEANER

15. The air cleaner (Fig 53(7)) is positioned in front of the generating unit engine and is accessible after raising the left front engine compartment cover. It is a cylindrical assembly embodying a two-stage method of air cleaning. The first stage is a cyclone filter which channels the heavier dust particles to a hopper in the base of the assembly and the second stage is a paper element filter which finally filters the air before it passes to the engine.

16. The paper element is contained in the upper part of the filter assembly and can be renewed for cleaning after removing the filter cover (1). The cover is secured by three clips (6).

17. A restriction indicator (2) of similar action to that fitted to the main engine air cleaner is fitted in the cover.

(Amdt.7)
1 Governor
2 Breather
3 Solenoid valve assembly
4 Brake cylinder top cover
5 Filler plug
6 Temperature switch connecting block
7 Pressure switch
8 Pressure switch connecting block
9 Steering brake disc
10 Steering brake caliper assembly
11 Adaptor
12 Output coupling
13 Bleed nipple
14 Mounting foot
15 Dipstick
16 Clutch drum
17 Input flange
18 Mounting foot
19 Oil filters

Fig 72 Gearbox, three-quarter front view

(Amtd.5)