

## SECTION 2

### DESIGN AND SPECIFICATION

#### 2-1 DESIGN AND SPECIFICATION

The FX 710 Searchlight is designed for battlefield illumination, it can produce  $1,000 \times 10^6$  peak beam candlepower approx at the centre of the spot beam. The peak illumination level at a clear operating range of 10 Km is 10 LUX approximately at the centre axis of the spot beam.

The searchlight operates with a 7 KW Xenon lamp and an electro-deposited nickel / rodium parabolic reflector, a manual focus facility is incorporated (control wheel) to give a beam divergence of 2-10 degrees.

A reeded glass filter can be fitted to give a 30 x 5 degree elliptical beam.

The searchlight has manual directional control with progressive locking mechanisms in both pan and elevation and also uses webbing straps and locking plates as transit locks. The light will pan 160 degrees in each direction, 30 degrees down and 90 degrees up in elevation.

In both modes of movement scales calibrated in mils are fitted, each with an adjustable datum lockable in position. Both scales are illuminated to a variable level.

Mounted on the side of the barrel is a levelling indicator such that the searchlight may be positioned horizontally irrespective of the attitude of the truck. The elevation scale pointer is then set to zero so that an angle of depression or elevation can be determined as appropriate.