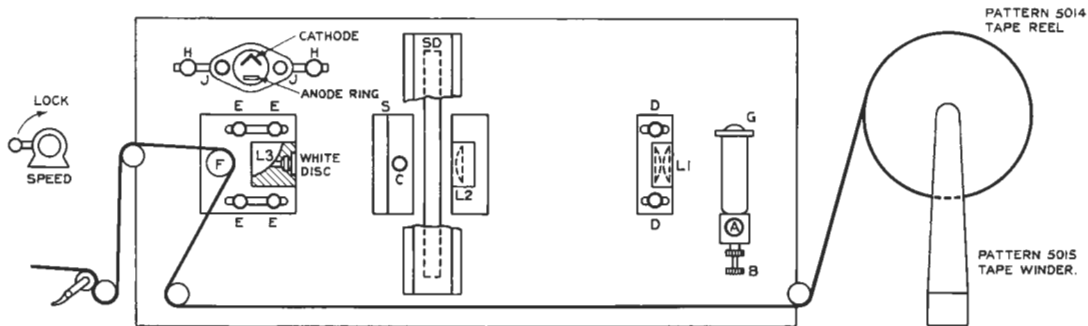


# ADMIRALTY PATTERN W.587 MORSE - TRANSCRIBING - UNIT.



## INSTRUCTIONS.

TAPE MUST BE WOUND ON REEL WITH SIGNAL OUTWARDS.

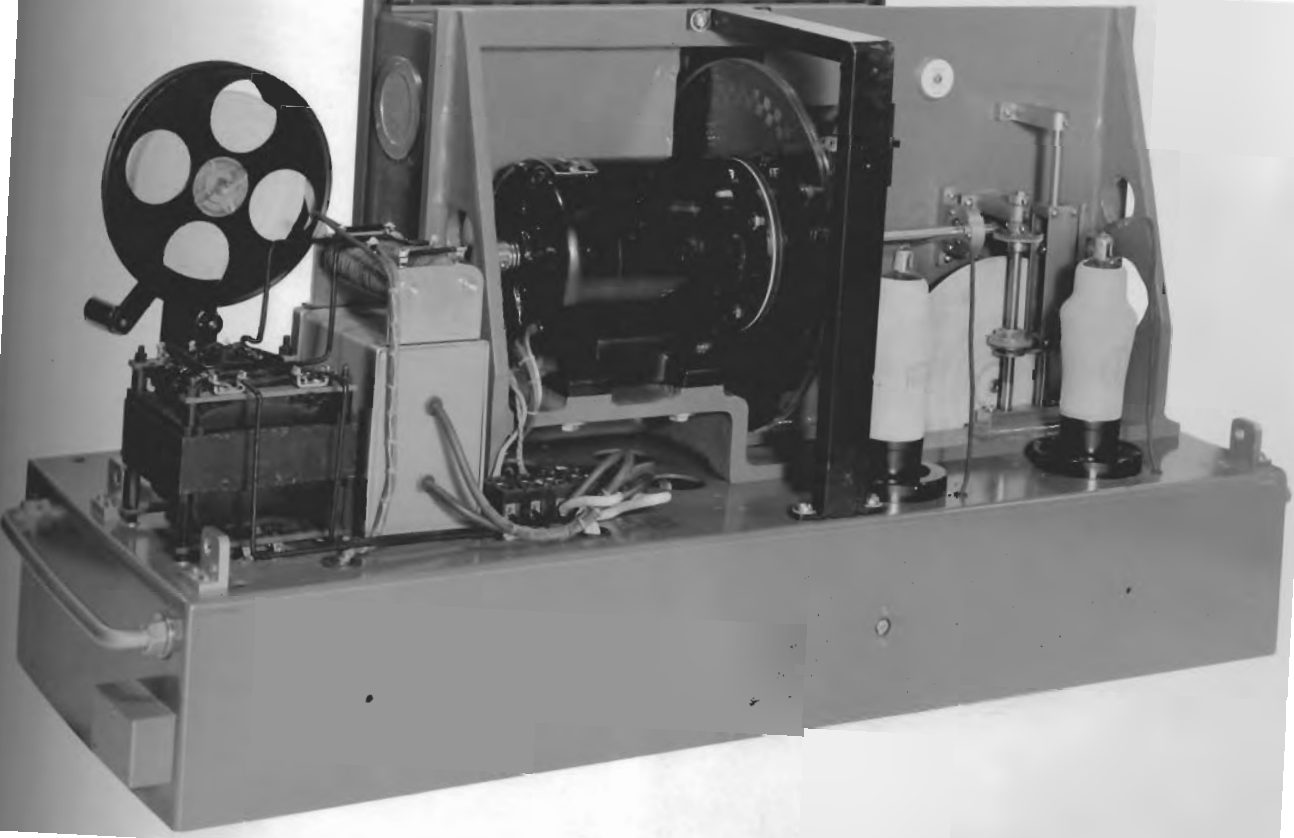
TAPE MUST BE THREADED IN MANNER SHOWN.

TO ADJUST BACKGROUND NOISE: SWITCH ON AMPLIFIER & MOTOR AND ALLOW LIGHT BEAM TO SCAN CLEAN TAPE. TURN SCREW C TILL MINIMUM SOUND IS HEARD.

TO ADJUST SCANNING: TURN SCREW F TILL LIGHT SCANS MARKING LINE BUT MISSES SPACING LINE. REGULATE SPEED BY SPEED CONTROL.

TO REPLACE LAMP: SLACKEN SCREWS A & B, RAISE CLAMP G, RAISE LAMP FROM SOCKET AND INSERT NEW LAMP. REPLACE CLAMP G, SWITCH ON AMPLIFIER & MOTOR AND ADJUST POSITION OF FILAMENT BY SCREW B UNTIL IMAGE OF FILAMENT IS CENTRAL ON LENS L2; TIGHTEN SCREW A, SCREW UP B ONE FURTHER TURN AND LOCK. THEN SLACKEN SCREWS D AND MOVE LENS L1 UNTIL UNIFORMLY BRIGHT CIRCULAR PATCH IS OBTAINED ON WHITE DISC ON L3. CLAMP SCREWS D.

FOR OTHER MAINTENANCE INSTRUCTIONS CONSULT HANDBOOK.



BOOK OF INSTRUCTIONS  
FOR  
ADMIRALTY PATTERN W.587  
MORSE TRANSCRIBING UNIT

DATE OF DESIGN 1940

INTRODUCTION. PURPOSE OF THE MACHINE

This apparatus has been designed to enable high speed undulator tape signals to be aurally transcribed at suitable speeds.

The requirements for its operation are that a clearly audible contrast should be obtained between marking and spacing signals. This contrast has been specified as a minimum of 15 db. and, as will be seen later, depends to a great extent on the colour of the ink used. The contrast actually obtained is enhanced by the amplifier by means of a special negative feedback circuit.

In order to cater for individual requirements a variable speed control is fitted which provides for a variation of tape speed from 1 foot per minute to 5 feet per minute.

Since different samples of tape are recorded with the spacing and marking lines in different positions relative to the edges, means are provided to shift the tape relative to the light scanning system, so that variations in the settings of individual undulators can be compensated.

## OPERATING INSTRUCTIONS

When recording on the undulator, portions of tape which may be subsequently required for transcription should not be cut off short at the commencement and end of the required messages. Two feet of spare tape should be left at each end for threading into the transcribing unit.

The tape for transcription should be threaded through the machine in accordance with the diagram on the instruction plate. For this purpose the tape must be wound on the Pattern 5014 reel with the signals outwards. The gate adjusting screw F must be moved so that one of the two slit images intersects the marking signal but does not intersect the spacing line on the tape. This adjustment can either be performed aurally or visually. When the adjustment is complete, the door of the optical compartment should be closed.

The gain of the amplifier should be adjusted for a convenient output signal. The speed of the tape may be regulated by the speed control, but it is important that the regulation of the speed should only be made while the motor is running, otherwise a flat will be worn on the friction wheel which will ultimately give trouble due to an uneven drive.

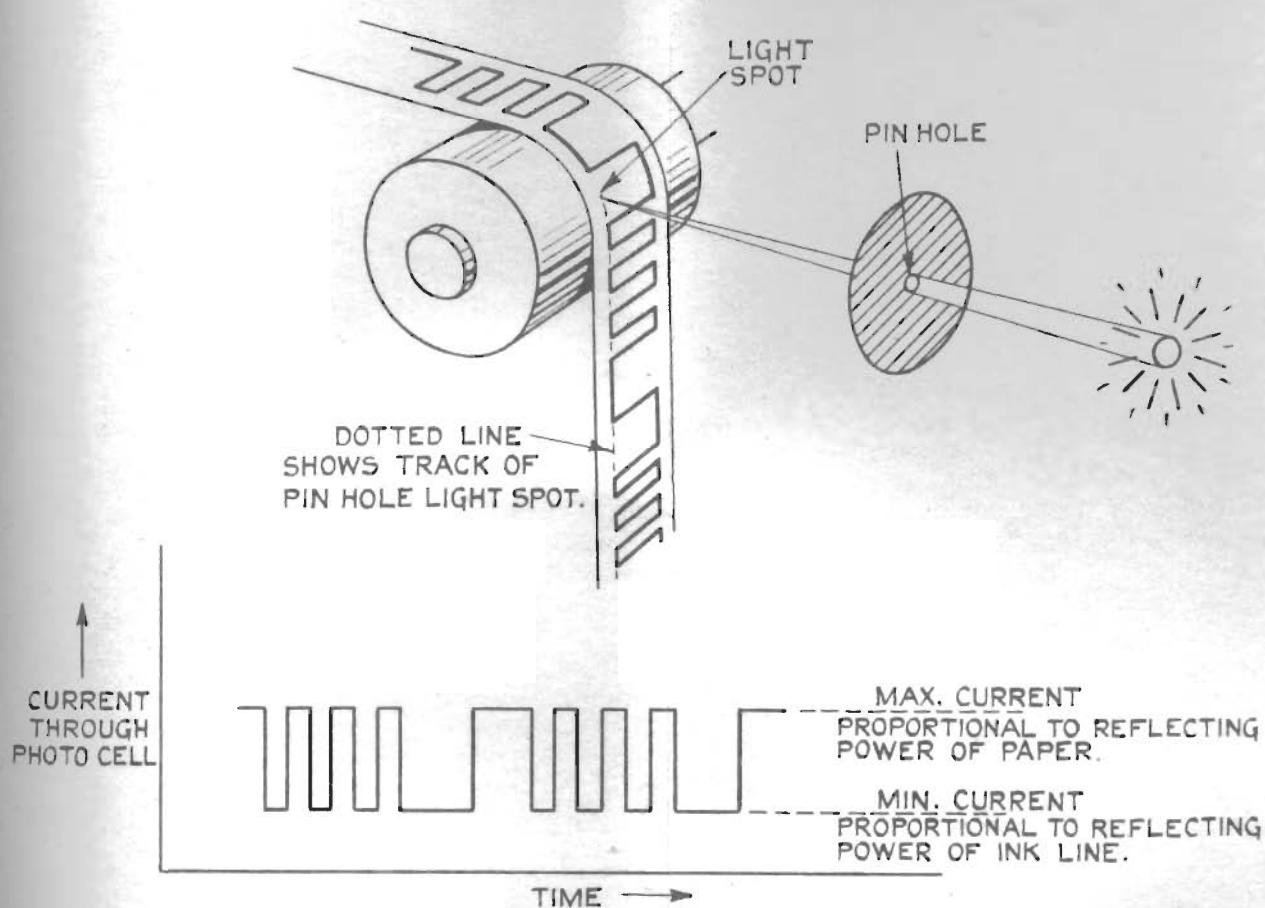


FIG. 1.  
SCANNING TAPE BY A STATIONARY  
LIGHT SPOT.

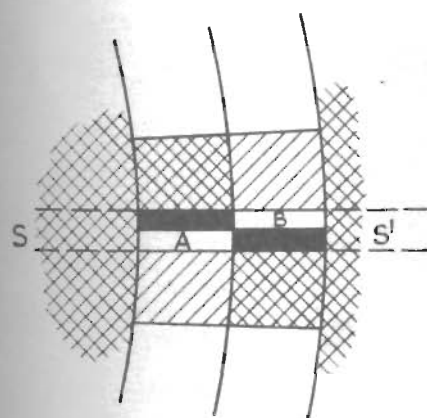


FIG. 2.

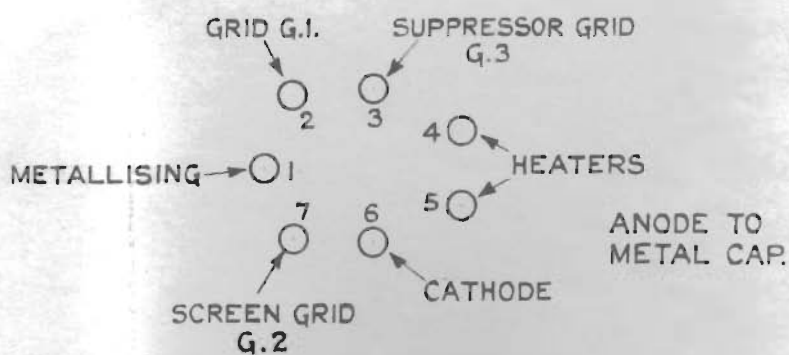


FIG. 6.  
VALVE PIN CONNECTIONS  
VIEWED FROM UNDERSIDE.