

TAPE WINDER

GENERAL DESCRIPTION AND PRINCIPLES OF OPERATION

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1. INTRODUCTION

1.01 This section is reissued to convert it from a special publication to a standard publication.

2. GENERAL DESCRIPTION

2.01 The Tape Winder is a motor driven mechanism used for winding tape produced from any fully perforated or chadless tape generating set. The winder may be used with equipment operating up to 600 words per minute.

2.02 The Tape Winder consists of a cast aluminum housing, a flat steel plate attached to the housing, an adjustable tape reel, and a power cable. An electric motor with a gear arrangement and a power switch are mounted onto one side of the steel plate and are covered by the housing. A tape winding control switch and operating arm with roller, braking wedge and brake operating lever, and strip with roller are mounted onto the side of the steel



Figure 1 - Tape Winder

plate exposed when attached to the housing.

2.03 The 7-1/2" diameter plastic reel facilitates handling 11/16", 7/8" and 1" tape, and accommodates 650 feet fully perforated or 325 feet chadless tape. Tape winds from the right or left depending on the location of certain parts.

3. PRINCIPLES OF OPERATION

3.01 The tape reel is driven by the motor through an arrangement of gears. When the brake operating lever is placed by hand to its stopped position towards the motor shaft, it closes the power switch. In this condition, the winding of tape is regulated by the tape winding control switch which is in series with the power switch. The tape winding control switch is actuated by the operating arm. As the tape slackens,

the operating arm with roller moves downward under its own weight and closes the tape winding control switch. The motor then drives the tape reel causing tape to be wound onto the reel until all of the slack in the unwound tape is taken up. The motor continues to operate the tape reel pulling the perforated tape tight. Then, as a result of this tightness and the routing of the tape under the operating arm roller and over the strip roller, the operating arm with roller rises from the roller end. This opens the tape winding control switch and stops the motor causing the tape reel to stop winding.

3.02 When the brake operating lever is placed by hand to its stopped position towards the motor shaft, it allows the braking wedge to ride the groove in the brake pulley and prevents any backward rotation of the tape reel during operation.

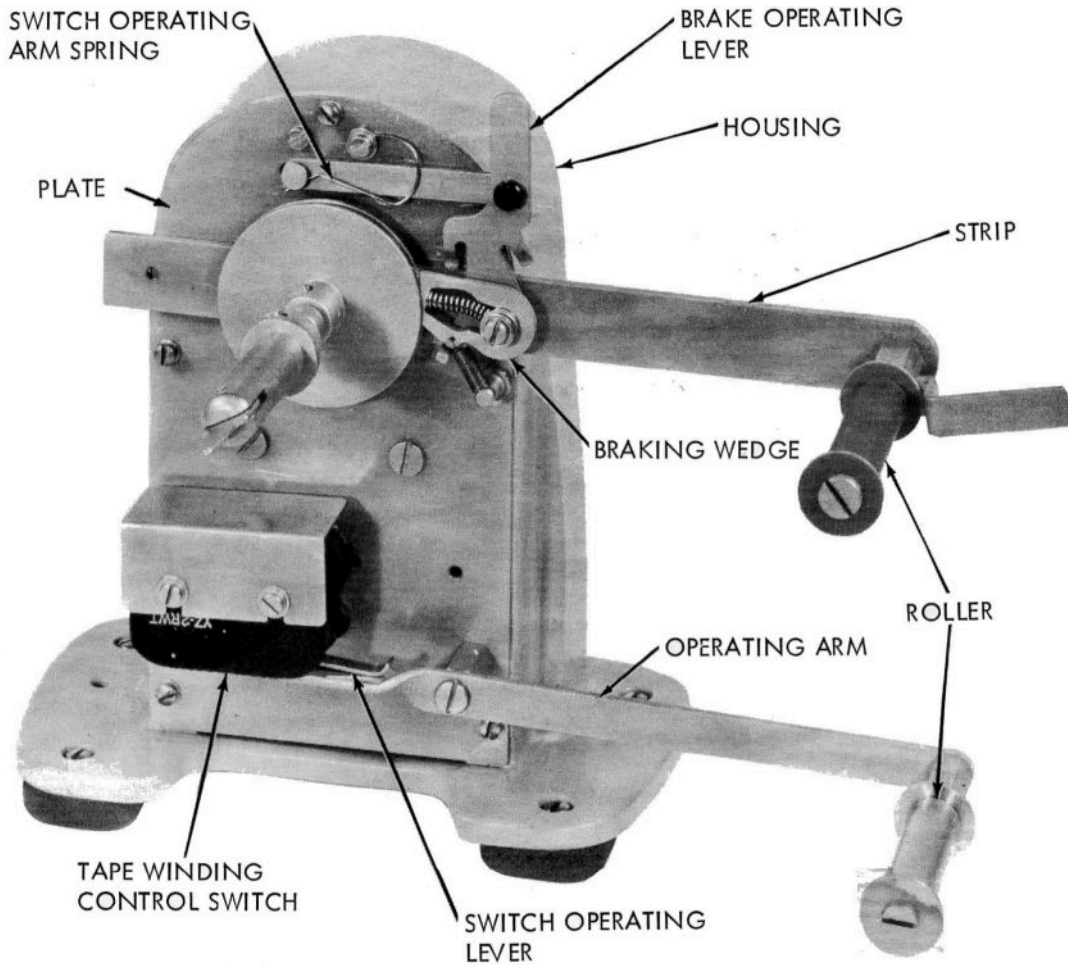


Figure 2 - Tape Winder without Tape Reel