

BASES FOR 35 TRANSMITTER-DISTRIBUTOR SETS
 DESCRIPTION AND PRINCIPLES OF OPERATION

CONTENTS	PAGE
1. GENERAL	1
2. DESCRIPTION	1
COMPACT UNIT	1
STANDARD UNIT	1
COMPONENTS	1
3. PRINCIPLES OF OPERATION	2
1. GENERAL	
1.01 This section describes and outlines the principles of operation of the units which provide mounting facilities for 35 Transmitter-Distributor Sets. Different style bases are described herein including a compact unit with motor and other larger units which do not include a motor, but provide facilities for mounting a choice of motor units. Refer to Figures 1, 2 and 3.	
2. DESCRIPTION	
2.01 In general, each base unit consists of a base plate and pan with four rubber mounts press fitted into holes from the bottom side. The mounts are of nonmarking rubber which supports the pan on a table or desk top as a means of reducing vibration. Four notches are in the upturned edge of the pan to support a cover.	
2.02 The base plates differ in construction and design. Each, however, is fastened to the base pan by rubber isolators. A multiple plug is provided with each base for wiring in external circuitry.	

COMPACT UNIT

2.03 The base plate in the compact unit, approximately 6-1/2 inches by 11-1/2 inches, contains openings and other mounting facilities for a motor, capacitor, switch bracket, terminal block, signal regenerator, bracket and a single shaft transmitter distributor. This plate is fastened to the base pan by means of rubber mounts pressed through holes in the plate which isolate it from the pan.

STANDARD UNIT

2.04 Base plates for the standard units are approximately 8-1/2 inches wide and 14 inches long. They are fastened to the base pan by means of four rubber block bracket arrangements which provide shock mounting. Provisions are made on the plate for mounting a motor unit (either synchronous or series governed), intermediate gear assembly, terminal block, switch bracket, signal regenerator and a transmitter distributor.

COMPONENTS

2.05 All the base plates are equipped with a switch bracket to which a fuse holder and a power switch are mounted. The switch is mounted at the top of the bracket so that its lever protrudes through the cover into a recessed area for accessibility when the cover is installed. The switch lever is recessed to prevent accidental operation.

2.06 Each plate is also equipped with a terminal block or a plug for making power connections.

2.07 A gear bracket assembly on each plate provides gear connection between the motor and the transmitter distributor. The assembly consists of a casting and a shaft with ball bearings. The assembly casting is isolated from the base plate by rubber mounts to reduce transmission of noise from the gears and ball bearings to the plate.

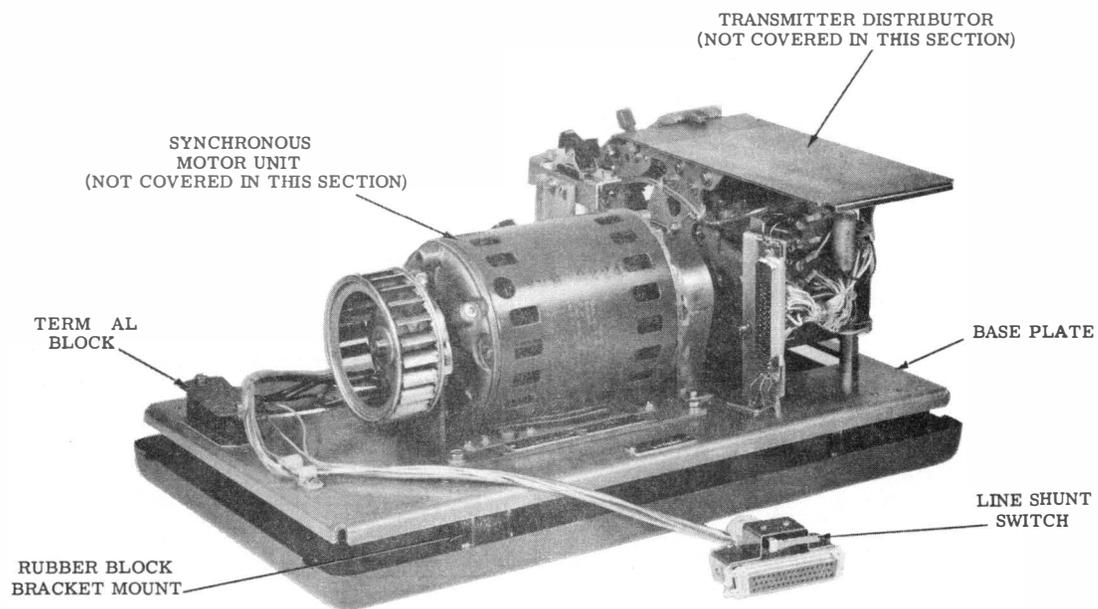
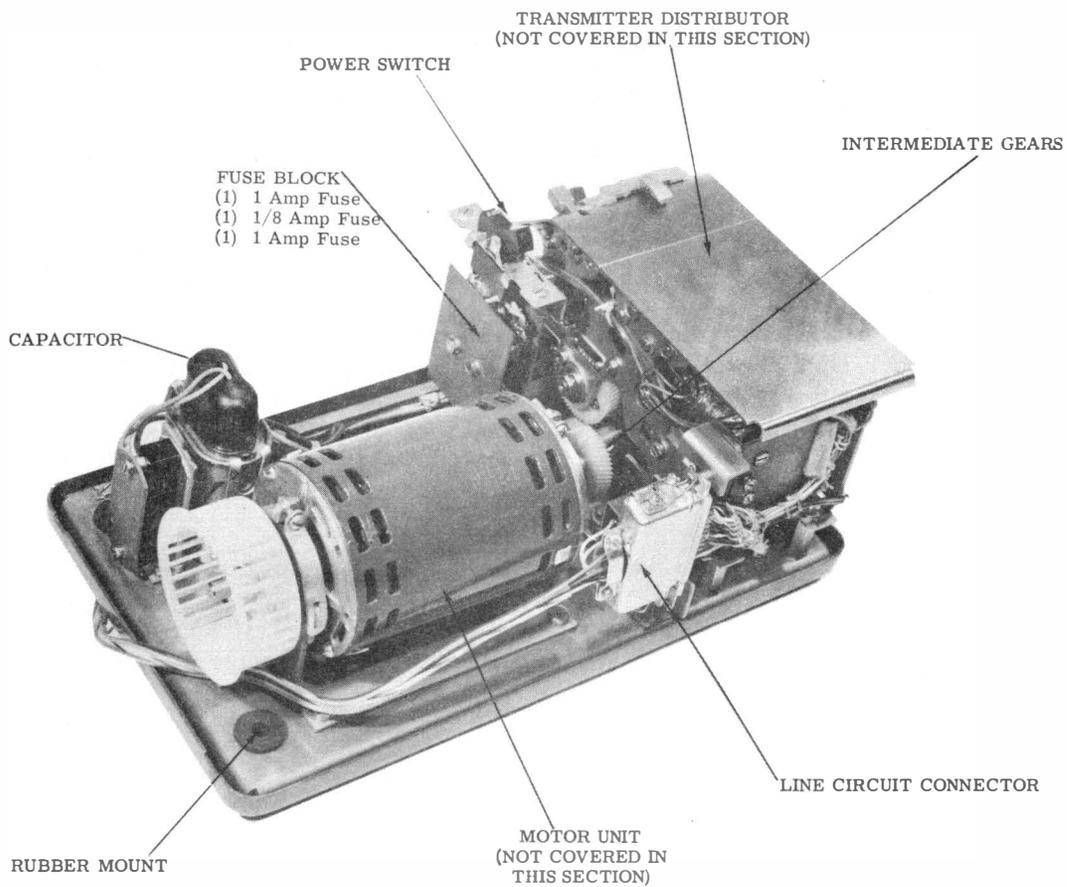


Figure 2 - Standard 35 Transmitter-Distributor Base with Cover Removed, and with Single Contact Transmitter Distributor and Synchronous Motor Unit in Place

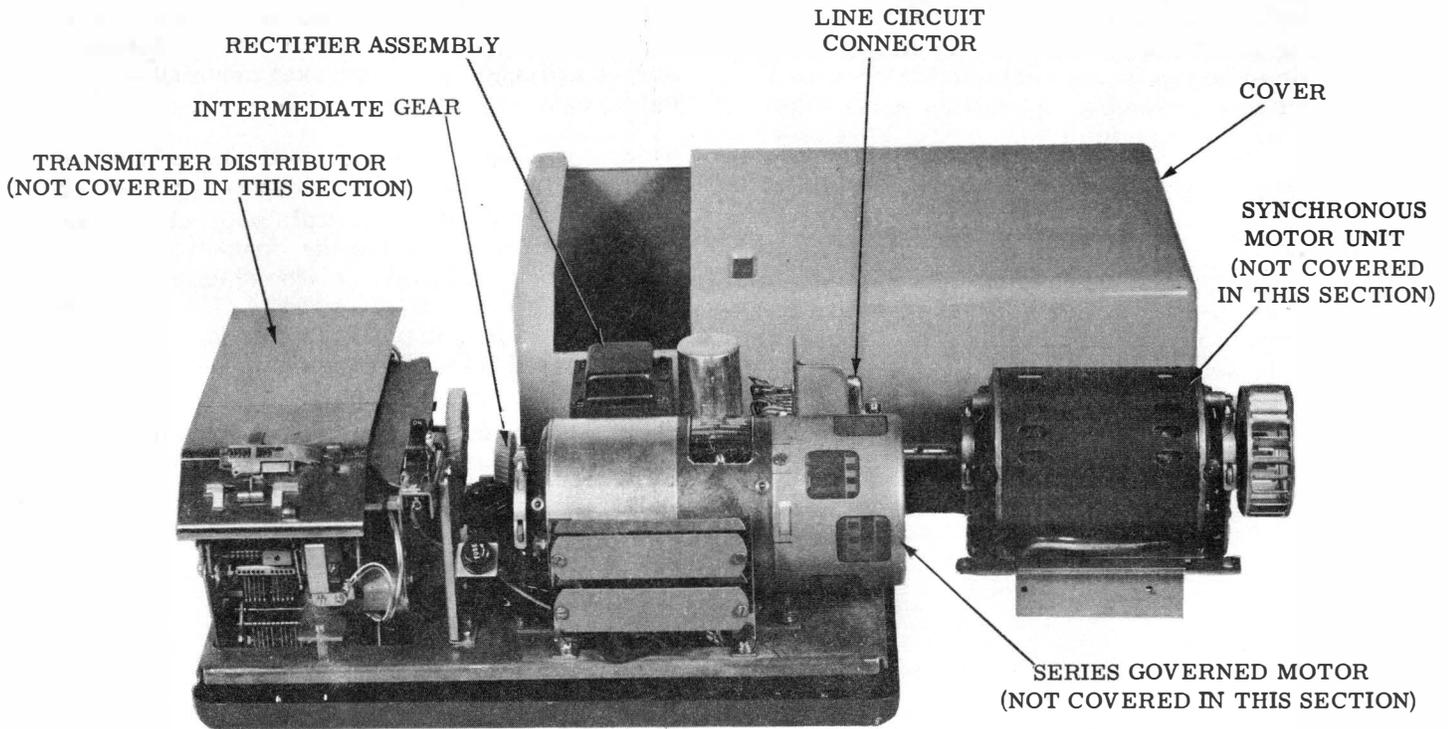


Figure 3 - Standard 35 Transmitter-Distributor Base and Cover with Multicontact Transmitter Distributor, Series Governed Motor Unit and dc Power Supply in Place (Alternate Synchronous Motor on Side)

2.08 A connector connecting the single-contact transmitter-distributor control circuitry is provided. This connector plugs into its mate on the transmitter distributor. A line shunt switch is mounted to the side of the connector cover for closing the line circuit when the transmitter distributor is removed from the base.

2.09 Three posts are provided to mount the transmitter distributor over an opening at the front of the base.

2.10 The compact unit includes a motor and a permanent split phase capacitor which are mounted to the base plate, whereas the standard base units require a complete motor unit either synchronous or governed. (See appropriate section for description of motor units.) The motor is a four-pole, 1/100 horsepower, 60 cycle, 1800 rpm, single phase, permanent split capacitor synchronous type with sintered bronze

bearings. The combination of low speed, capacitor run operation and the sleeve bearings provide an extremely low operating noise level. A slow-blow fuse is provided to open the power circuit when the motor becomes stalled. The capacitor is a metal encased oval type with paper and oil dielectric and dual blade connectors.

2.11 The base plate used with the multicontact transmitter distributor is provided with a mounted receptacle near the front of the base plate for connection with a multiple point plug on the transmitter distributor. A line shunt switch is provided on the left side of the base plate to shunt the signal line when the transmitter distributor unit is removed from the base. A second connector is mounted on a bracket at the rear of the base plate. A cable is provided between these two connectors to bring the circuitry to the rear. A mating connector is provided at the rear of the unit for connecting to external circuitry. A sec-

SECTION 574-223-101

ond bracket is provided with a three-point power receptacle with a plug to which power must be connected. Two other brackets are provided for mounting two terminal blocks. Provisions are made for mounting some variable features such as a rectifier assembly, a dc control relay assembly, or an electric motor control assembly.

3. PRINCIPLES OF OPERATION

3.01 The transmitter-distributor base functions as a mounting unit for a motor, a transmitter-distributor unit, set of gears and the necessary power and signal line wiring to operate a complete set.

3.02 The motor, through a set of gears, drives the transmitter-distributor unit at speeds of 60, 75 or 100 words per minute depending on the set of gears used.

3.03 When installed, a power input of 115 volts passes through a power switch and a fuse for control and protection to the motor. Connections for the motor, switch, fuse and accessories are made on two bracket mounted terminal blocks.

3.04 The circuitry for the single contact transmitter distributors used on the bases is wired into a multiple plug which connects directly to its mating connector on the transmitter distributor. A line shunting switch built on the connector is used to close the line circuit when it is disconnected from the transmitter distributor. See Figure 2.

3.05 The circuitry for the multicontact transmitter distributor is wired into the base by a cable which connects with external circuitry through a multiple plug near the rear of the base.