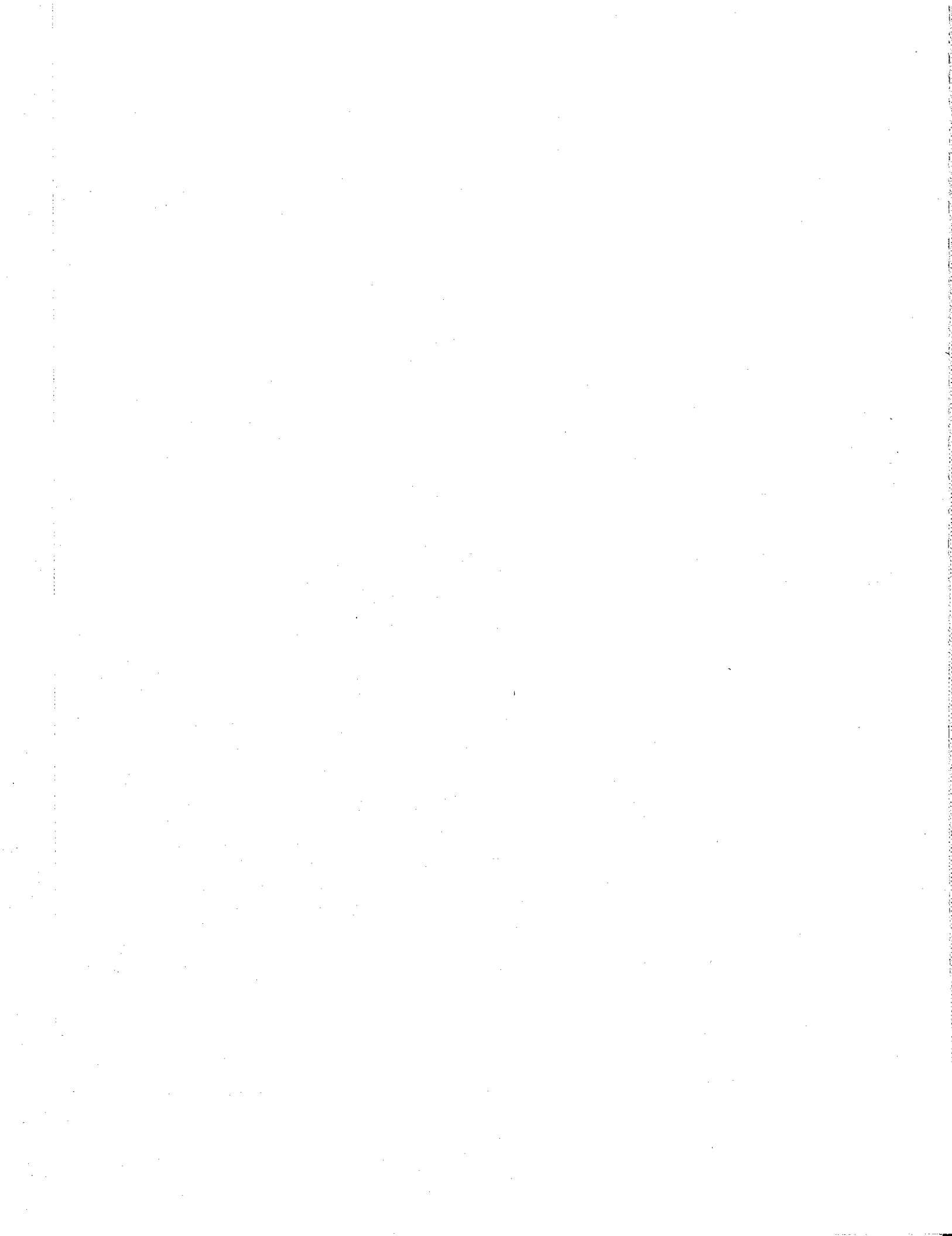


SUPPLEMENTAL

 **BIRD**
INSTRUCTION
book

MODELS 6732/34/35/36/37



Instruction Booklet applying to
Model 6730 Series Termaline Wattmeter

This booklet supplements the Instruction Book for the appropriate RF Load used with the input Wattmeter Section and the Meter and Housing Assembly as listed below to make up your Termaline Wattmeter.

<u>Termaline Wattmeter Model No.</u>	<u>RF Load</u>	<u>Wattmeter Section</u>	<u>Meter and Hsy. Assy.</u>
6732	8141	6735-004	6735-002-4
6734	8201	6735-004	6735-002-1
6735	8833-300	6735-004	6735-002-2
6736	8251	6735-004	6735-002-5
6737	8230	6735-004	6735-002-3

Basic Specifications

Power Rating. See Table Below

Power Ranges. See Table Below

Impedance 50 ohms nominal

VSWR. DC to 1000 MHz - 1.15 max.

Accuracy. 25 to 512 MHz - ±5% of FS
 512 to 1000 MHz - ±10% of FS
 (Models 6734, 6736 & 6737 option) 2 to 30 MHz - ±5% of FS#
 1.5 to 35 MHz - ±10% of FS

<u>Model No.</u>	<u>Power Ranges (Watts)</u>	<u>RF Load</u>	<u>Input Connector Normally Supplied</u>	<u>Power Rating (Watts)</u>
6732	10/50/250	8141	F (N)	250
6734	25/100/500	8201	F (N)	500
6735	120/600/1200	8833*	F (LC)	1000
6736	50/250/1000	8251	F (LC)	1000
6737	100/500/2500	8230**	F (LC)	2500

#An optional Wattmeter Line Section is available to extend the frequency range down to 1.5 MHz for Models 6734, 6736 and 6737.

*Intermittent 1200 watt rating (See Load Instruction Book)
 **Water cooling required (See Load Instruction Book)

NOTE: (a) Model 6734 replaces Model 67
 (b) Model 6735 replaces Model 6835
 (c) Model 6737 replaces Model 67C

Wattmeter Circuit

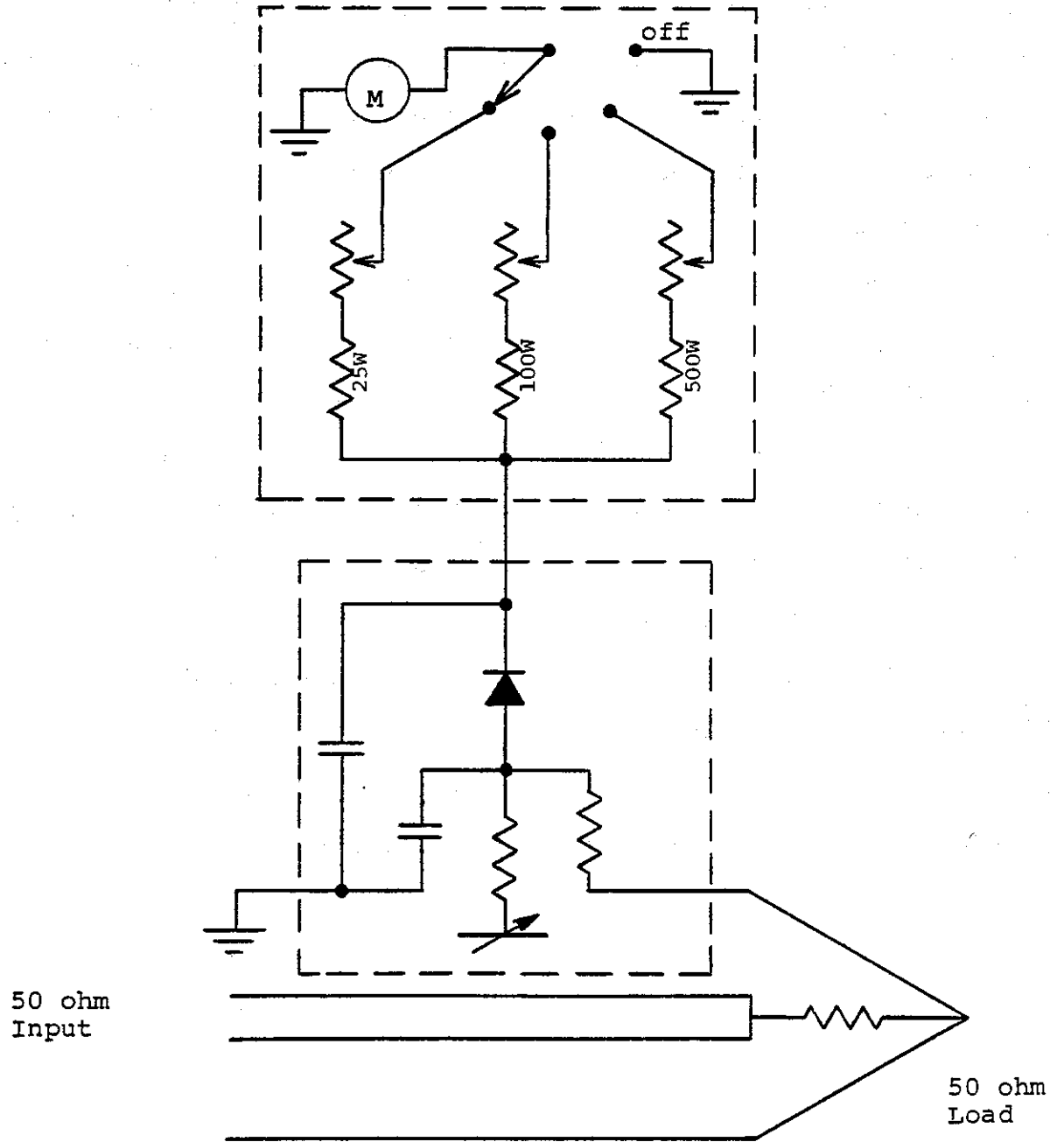
Basically consists of voltage capacitive divider with one of the capacitors being an adjustable probe whose spacing can be varied from the center conductor. The small voltage developed across the fixed capacitor is rectified by a diode. A simple RC filter eliminates any RF present and the rectified DC current is fed to the meter.

The Wattmeter measures three separate power ranges by selectively switching in the various values of resistance in series with the meter. One of the resistors in each range is adjustable and are located on back of the meter. The range switch control knob is located on the front face of the meter housing.

There is also a spare crystal holder located on the front face of the meter housing.

Mechanically the Wattmeter section consists of a 50 ohm line section with a socket to hold the voltmeter cartridge including the diode. The meter cable is screwed directly on top of the voltmeter cartridge to complete the assembly.

Schematic Diagram



NOTE: Power ranges shown are for Model 6734.

Connections

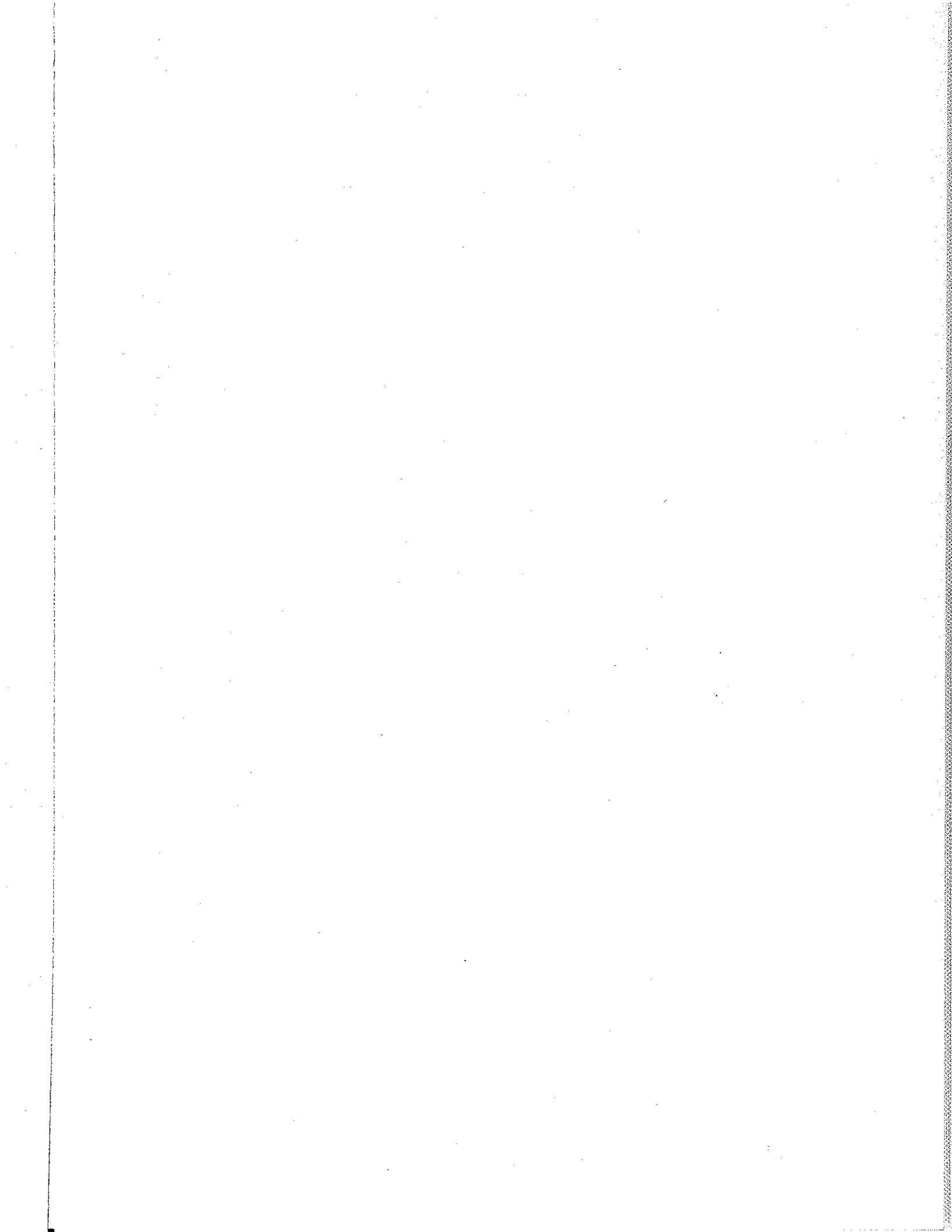
One end of the line section has a protruding center conductor that fits into the load, the other end is the receptacle for the input connector.

The Wattmeter line section can be removed from the Load by removing the four 8-32 screws and pulling straight out. The input connector on the other end of the line section can be substituted also by removing the four 8-32 screws and pulling the connector straight out.

This is the Bird "Quick-Change" design, which permits rapid interchange of connector types in the Bird "Q.C." family. The center contact pin should be properly aligned in the socket when inserting. The center contact pin can be damaged by careless handling.

Replacement Parts List

<u>Part No.</u>	<u>Description</u>	<u>Quantity</u>
6733-009	Voltmeter Cartridge Assy.	1
5-1180	Diode	1
2000-063	Meter (Model 6735)	1
2000-064	Meter (Model 6734)	1
2000-065	Meter (Model 6737)	1
2000-066	Meter (Model 6732)	1
2000-067	Meter (Model 6736)	1
6735-008	Switch, Rotary	1
4240-062	Connector (Female N)	1
4240-031	Connector (Female LC)	1
6735-011	Assembly, DC Cable	1
2-249	Cable Clamp	1
6733-025	Spare Crystal Cap	1
6733-054	DC Conn. Shorting Plug	1
4110-016	Range Switching Knob	1



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