# 4066C NETWORK

# DESCRIPTION

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## 1. GENERAL

**1.01** This section describes the 4066C network, which is a plug-in apparatus unit designed for use in V4 telephone repeater applications but usable also in other repeater applications.

**1.02** The 4066C network combines a compromise network (COMP NET.) and a building-out capacitor (BOC) in a single plug-in apparatus unit. The compromise network consists of a 2.15-$\mu$f capacitor which may be switched in series with either a 600-ohm or a 900-ohm resistor. The BOC provides accurate building-out capacitance over a range of 0.000 to 0.127 $\mu$f in 0.001-$\mu$f steps.

**1.03** The 4066C network is designed for use with older 4-wire terminating sets not equipped with compromise network and BOC features. The 4066C network is normally mounted in a V4 miscellaneous equipment mounting shelf (J98615AP or AR) and is cross-connected into the repeater as required.

## 2. EQUIPMENT DESCRIPTION

**2.01** The 4066C network (see Fig. 1) consists of an aluminum can containing two printed circuit boards, a 20-pin connector plug, and a plastic faceplate which contains nine screw-type switches. The network is approximately 1-3/4 inches high by 1-3/4 inches wide by 7 inches long. Tabs are provided on the front of the can to facilitate removal of the network from the mounting shelf by the use of a 602C or 602D tool.

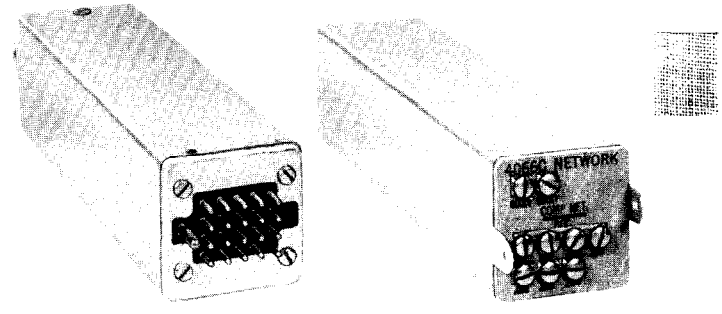

Fig. 1 — 4066C Network

**2.02** The designations COMP NET. and BOC and the component value each switch controls are permanently marked on the faceplate. Adjustment of the COMP NET. and BOC is accomplished by opening or closing the appropriate faceplate screw-type switches.

## 3. CIRCUIT DESCRIPTION

**3.01** Fig. 2 is a schematic of the 4066C network. The BOC portion of the circuit consists of seven capacitors, C1 through C7, connected in parallel and individually controlled by faceplate screw-type switches. The BOC may be adjusted by proper combination of C1 through C7 to provide building-out capacitance over the range of 0.000 to 0.127 $\mu$f in 0.001-$\mu$f steps.

**3.02** The COMP NET. consists of capacitor C8 and resistors R1 and R2. The resistors may be selected by faceplate screw-type switches to provide optional compromise impedances of 600 ohms in series with 2.15 $\mu$f or 900 ohms in series with 2.15 $\mu$f.

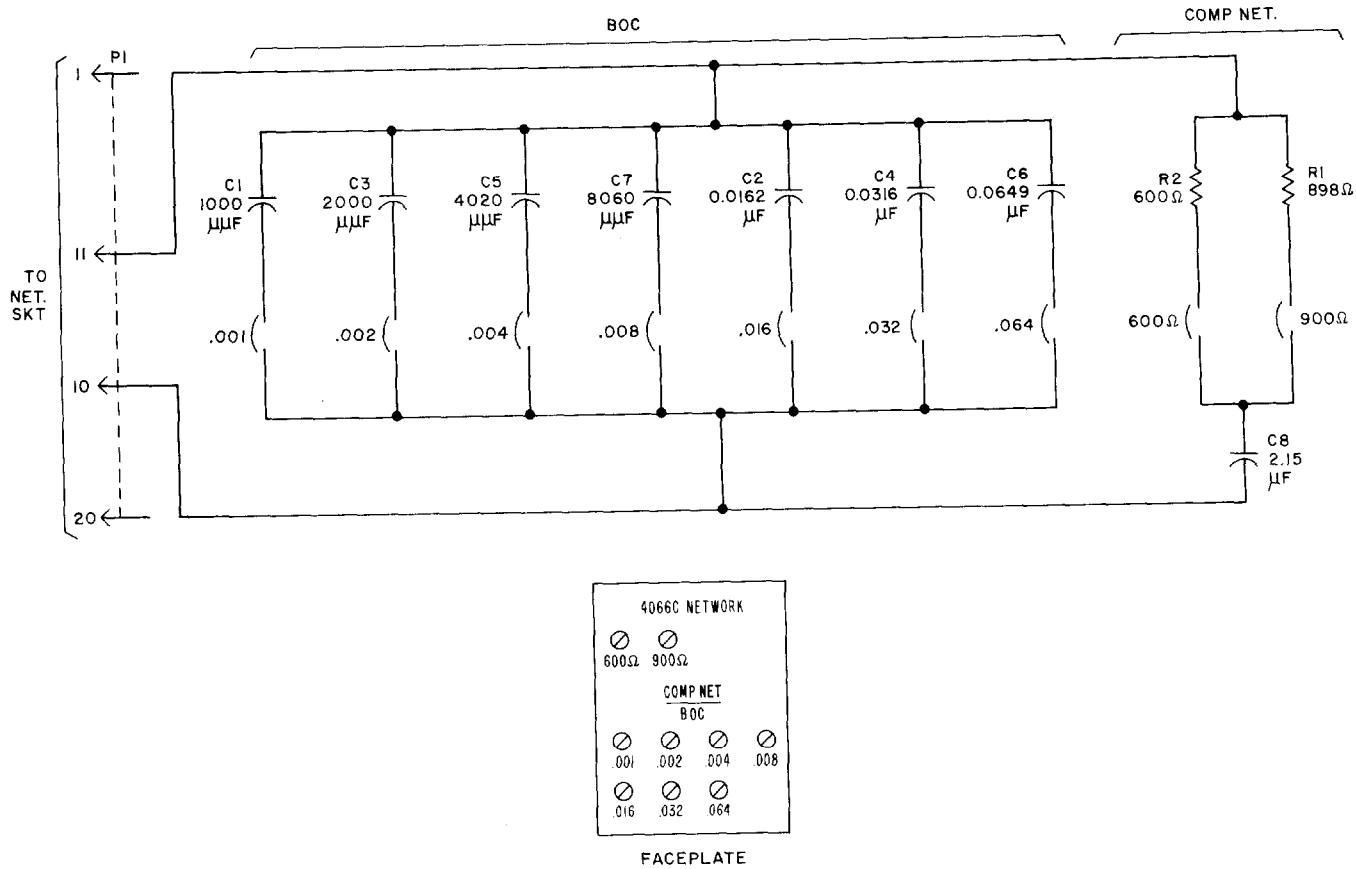


**Fig. 2 — 4066C Network — Schematic**