

J-JACKS[®]

U.S. Patent 3,105,873
 Canadian Patent 691,835

VIDEO/R-F PLUG

MODEL J-517

DESCRIPTION

Model J-517 is a J-Jacks plug designed for making one r-f and two video connections to a distribution line. The J-517 mates with the all-channel J-502 receptacle or, in existing VHF systems, with the J-501 receptacle.

The J-517 is designed to pass video in only one direction along the distribution line: between J1 and J3 or between J2 and J5 (Figure 1). The line terminals J1 and J2 are isolated at video frequencies, as are the line and opposite video terminals (J1 and J5, J2 and J3). Refer to the specifications.

The J-517 is equipped with two push-on fittings, which mate with fittings on the receptacle, and three F-61A fittings for the r-f and video connections. Each unit is shipped with three F-59A connectors and a J-key for tightening the tamper-proof lock screw.

SPECIFICATIONS

FREQUENCY RANGE	
Video	d. c. to 9 MHz
R-F	17.75 to 890 MHz
INSERTION LOSS	
Between line terminals (J1 and J2)	1 dB, 17.75 to 54 MHz 0.8 dB, 54 to 216 MHz 1.1 dB, 470 to 890 MHz
Between line terminal and nearest video terminal (J1 and J3 or J2 and J5)	0.5 dB, d. c. to 9 MHz
TAP LOSS	
Between line terminals and r-f terminal	21 dB, 17.75 to 890 MHz
ISOLATION	
Between line terminals	45 dB d. c. to 4.5 MHz 35 dB 4.5 MHz to 9 MHz
Between line terminal and opposite video terminal (J1 and J5 or J2 and J3)	20 dB, d. c. to 9 MHz and 17.75 to 890 MHz
TERMINALS	
IMPEDANCE (all terminals)	75 Ω
MATCH	
Line terminals	VSWR 1.196:1 max. (21 dB min. return loss), d. c. to 9 MHz and 17.75 to 216 MHz
	VSWR 1.29:1 max. (18 dB min. return loss), 470 to 890 MHz
Video terminal	VSWR 1.196:1 max. (21 dB min. return loss), d. c. to 9 MHz

INSTALLATION

1. Plug the J-517 into the receptacle.
2. Tighten the lock screw with the J-key.
3. Cut lengths of RG-59 cable to connect the video and r-f equipment to the J-517.
4. Install F-59A connectors on the cable ends as in Figure 2 and connect the equipment to the J-517.

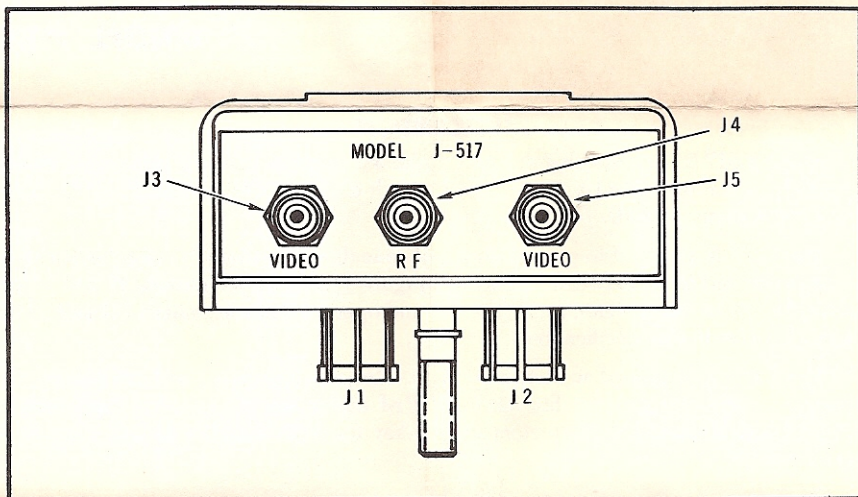
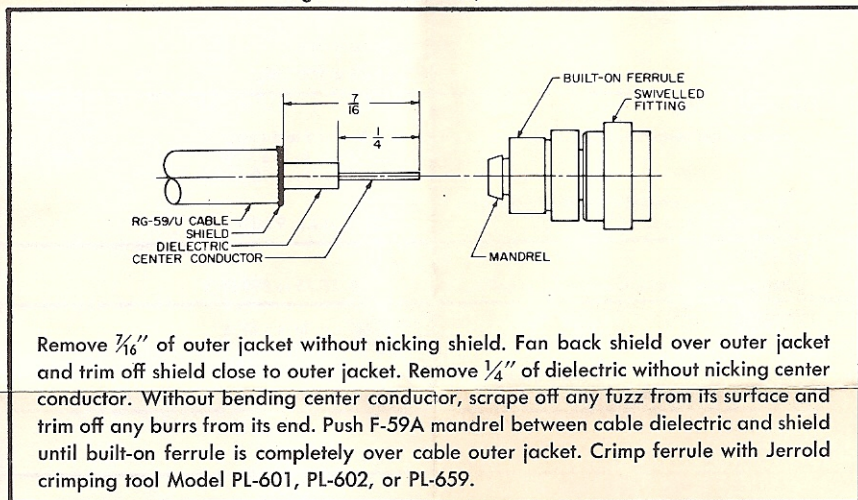


Figure 1. Model J-517, Bottom View



Remove $\frac{7}{16}$ " of outer jacket without nicking shield. Fan back shield over outer jacket and trim off shield close to outer jacket. Remove $\frac{1}{4}$ " of dielectric without nicking center conductor. Without bending center conductor, scrape off any fuzz from its surface and trim off any burrs from its end. Push F-59A mandrel between cable dielectric and shield until built-on ferrule is completely over cable outer jacket. Crimp ferrule with Jerrold crimping tool Model PL-601, PL-602, or PL-659.

Figure 2. Preparation of Cable for Installing F-59A Connectors

All data subject to change without notice.

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