product modification

050-0439-01

M15227,M16159

Type P6042

CURRENT TRANSFORMER ASSEMBLY REPLACEMENT

For TEKTRONIX® Type P6042 Current Probes

All Serial Numbers

Current Transformer, PN 120-0464-01 (which includes three selected resistors), replaces Current Transformer, PN 120-0464-00. Three resistors are selected for optimum temperature compensation, and optimum probe cable termination. C62 and C106 were changed to variable capacitors to ensure optimum transient response.

The installation consists of replacing three resistors and three capacitors in the amplifier and the current transformer in the probe.

NOTE: If the serial number of your instrument is above B114009 or if this kit or 050-0547-00 has been installed, disregard steps 9 through 11 and replace T1 with current transformer, pn 120-0464-01, and its selected resistors.

12-17-79

Supersedes: 7-23-73

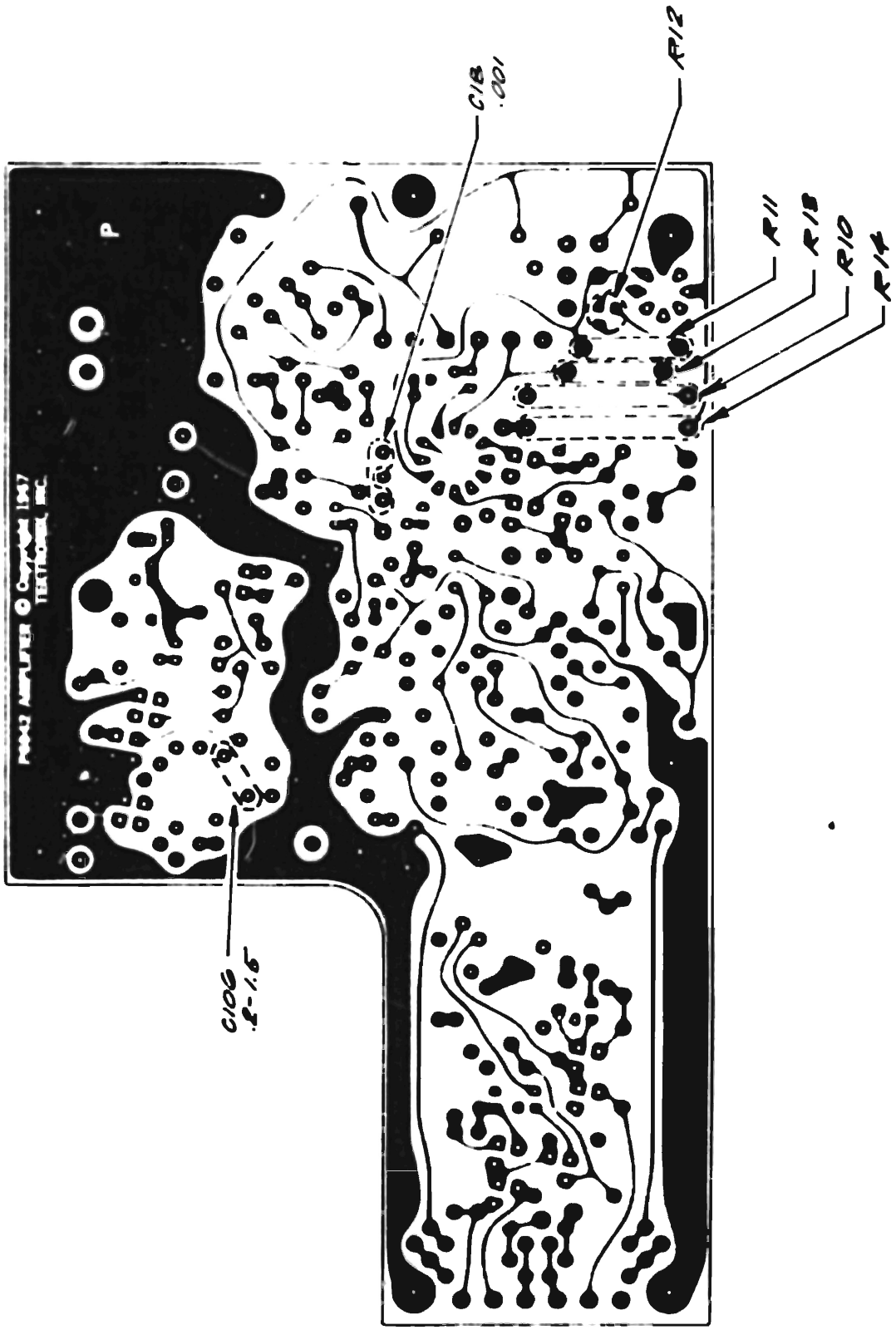

FIG. 1

PARTS INCLUDED IN PARTS REPLACEMENT KIT:

Ckt.No.	Quantity	Part Number	Description
	(1 ea)		Transformer, current consisting of:
	1 ea	120-0464-01	Transformer, current
R10	1 ea		Selected
R11 or R13	1 ea		Selected
R14	1 ea		Selected
C106	1 ea	281-0095-00	Capacitor, var, plastic, .2-1.5pF
C62	1 ea	281-0123-00	Capacitor, cer. 5-25pF
C18	1 ea	283-0078-00	Capacitor, cer. .001µF
R62	1 ea	317-0151-00	Resistor, comp. 150Ω 1/8W 5%

INSTRUCTIONS:

( ) 1. Disassemble the probe according to the instructions in the Maintenance section of your Instruction Manual.

( ) 2. Replace the stationary and movable portions of the core (TEKTRONIX Type Part Number 120-0464-00).

( ) 3. Re-assemble the probe according to the instructions in your Instruction Manual.

( ) 4. Remove the amplifier cabinet.

Refer to Fig. 1 for steps 5 through 10.

( ) 5. Replace R10 with the resistor labeled 'R10' from the kit.

( ) 6. Remove resistor R11 or R13, whichever one is present.

( ) 7. Install resistor R11 or R13, whichever one is supplied with the kit.

( ) 8. Replace R14 with the resistor labeled 'R14' from the kit.

THIS COMPLETES THE INSTALLATION FOR INSTRUMENT ABOVE SN B114009.

Instruments with serial numbers B104008* or below, ONLY, perform steps 9 through 11.

( ) 9. Replace C18, a .0033µF capacitor, with a .001µF capacitor from the kit.

( ) 10. Replace C106, a .68pF capacitor, with a .2-1.5pF capacitor from the kit.

*OMIT steps 9-11 if 050-0547-00 has been installed.

INSTALLATION (continued)

( ) 11. Refer to Fig. 2.

Replace the RC combination of R62 and C62, located on the DEGAUSS switch, with the 150Ω 1/8W resistor and the 5-25pF capacitor from the kit.

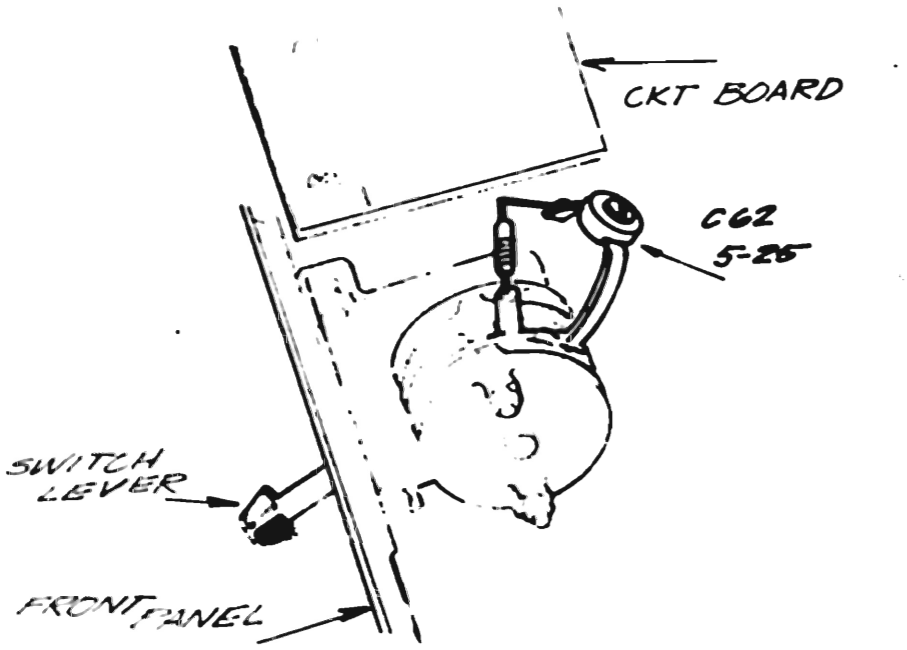

FIG. 2

( ) If R11 was installed in step 7, adjust R12 (see Fig. 1 for location) to the CLOCKWISE extreme.

( ) If R13 was installed in step 7, adjust R12 (see Fig. 1 for location) to the COUNTERCLOCKWISE extreme.

( ) Refer to Manual Insert for recalibration.

( ) Fasten the Manual Modification Insert pages in your Instruction Manual.

JT:ls

INSTRUCTION MANUAL

MODIFICATION INSERT

CURRENT TRANSFORMER ASSEMBLY REPLACEMENT

Type P6042 All Serial Numbers

Installed in Type P6042 SN_____ Date_____

This insert has been written to supplement the Instruction Manual for this instrument. The information given in this insert will supersede that given in the manual.

GENERAL INFORMATION

Current Transformer, PN 120-0464-01 (which includes three selected resistors), replaces Current Transformer, PN 120-0464-00. Three resistors are selected for optimum temperature compensation, and optimum probe cable termination. C62 and C106 were changed to variable capacitors to ensure optimum transient response.

RECALIBRATION:

Refer to your Instruction Manual and modify the calibration procedure as shown below:

( ) Change the title of step 14 on page 6-12 to read:

Adjust Compensation Circuits (R102, R18, R24, C62, C100, C106 R100, and R105).

( ) Change step 14 part h on page 6-13 to read:

h. Change Time/CM to .1µs. Adjust C62, C100, C106, R100, and R105 for best leading edge and square corner on waveform.

ELECTRICAL PARTS LIST

Ckt. NO.	Part Number	Description
		CAPACITORS
C18	283-0078-00	.001µF Cer 500V
C62	281-0123-00	5-25pF Cer 100V
C106	281-0095-00	.2-1.5pF plastic 750V
		RESISTORS
R62	317-0151-00	150Ω 1/8W 5%
		TRANSFORMERS
T1	050-0440-01	Current