

MODIFICATION KIT

ADDITIONAL TRIGGER SOURCES



For Tektronix Type 555 Oscilloscopes
Serial numbers 101-6999

DESCRIPTION

This modification installs coax cables between the interconnecting sockets of the Type 555. These coax cables provide the necessary signal path to allow the PLUG-IN positions of the Types 21A and 22A TRIGGER SOURCE switches to be utilized in conjunction with Type 1A1 or 1A2 dual channel vertical plug-ins.

The use of these additional sources allows display of the input signals in their true time or phase relationships.

CAUTION: Type 21 or 22 Time-Base plug-ins must be modified before they may be operated in a Type 555 Oscilloscope containing Modification Kit 040-0328-01. Refer to the kit instructions for the proper modification procedure.

040-0328-01

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Instructions for 040-0328-01
March 1967

Supersedes:
040-328

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040-0328-01

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PARTS LIST

Quantity	Part Number	Description
7 ea	006-0531-00	Tie, nylon cable, blue
1 ea	214-0210-00	Spool, w/3 ft. silver-bearing solder
2 ea	343-0005-00	Clamp, cable, plastic, 7/16 in.
1 ea	(1-910D)	Tag, MODIFIED INSTRUMENT, gummed back
3 ea		Tubing, vinyl, #10 black, 162-0006-00, 1/2 in.
2 ea		Cable, coax, 93Ω 1/8 in. (stripped), 175-0055-00, 9-1/2 in.
2 ea		Cable, coax, 93Ω 1/8 in. (stripped), 175-0055-00, 22-1/2 in.
1 ea		Wire, #14 solid, bare, 176-0119-00, 12 in.

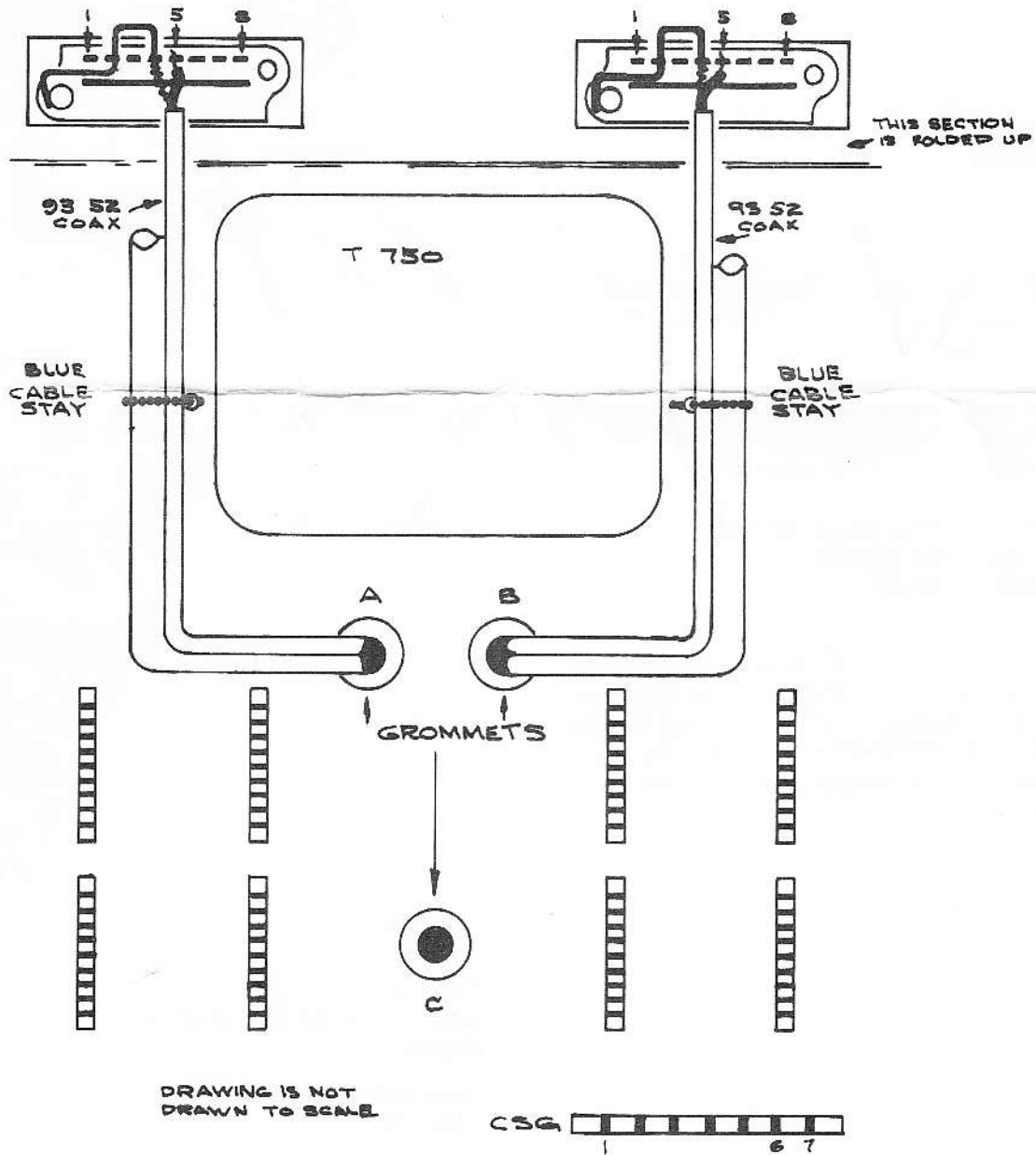


FIG. 1

INSTRUCTIONS

IMPORTANT: When soldering to the ceramic strips, use the silver-bearing solder supplied with this kit.

- (1) 1. Remove the following from the Type 555 Indicator:
Bottom panel, left and right sides, and filter housing and filter.

NOTE: Perform all the following steps with the Indicator on its left side, as viewed from the rear of the instrument.

REFER TO FIG. 1 WHILE PERFORMING STEPS 2 THROUGH 13

- (1) 2. Unsolder both fan wires, making note of wiring for future reference.
- (1) 3. Remove the six self-tapping screws from the fan motor ring assembly.
- (1) 4. Pull the motor wires through grommet C and remove the fan motor assembly.
- (1) 5. Place one end of a 22-1/2 in. coax (from kit) through grommet A from the bottom. Dress the coax along the wiring cables to the UPPER BEAM Vertical plug-in interconnecting socket (use only enough to reach the socket).
- (1) 6. Fasten the coax to the cable with a blue cable tie (cut off excess tie) from the kit.
- (1) 7. Solder the center conductor of the coax to pin 5 of the interconnecting socket.
- (1) 8. Solder a #14 bare wire (from kit) from pin 2 to pin 4 of the UPPER BEAM interconnecting socket, and from pin 2 of pin 4 of the LOWER BEAM interconnecting socket.
- (1) 9. Solder the outside braided conductor of the coax to pin 4 of the interconnecting socket.
- (1) 10. Place one end of the remaining 22-1/2 in. coax (from kit) through grommet B from the bottom. Dress the coax along the cables to the LOWER BEAM Vertical plug-in interconnecting socket (use only enough to reach).
- (1) 11. Fasten the coax to the cable with a blue cable tie (cut off excess tie) from the kit.
- (1) 12. Solder the center conductor of the coax to pin 5 of the interconnecting socket.
- (1) 13. Solder the outside braided conductor to pin 4 of the interconnecting socket.

INSTRUCTIONS (cont)

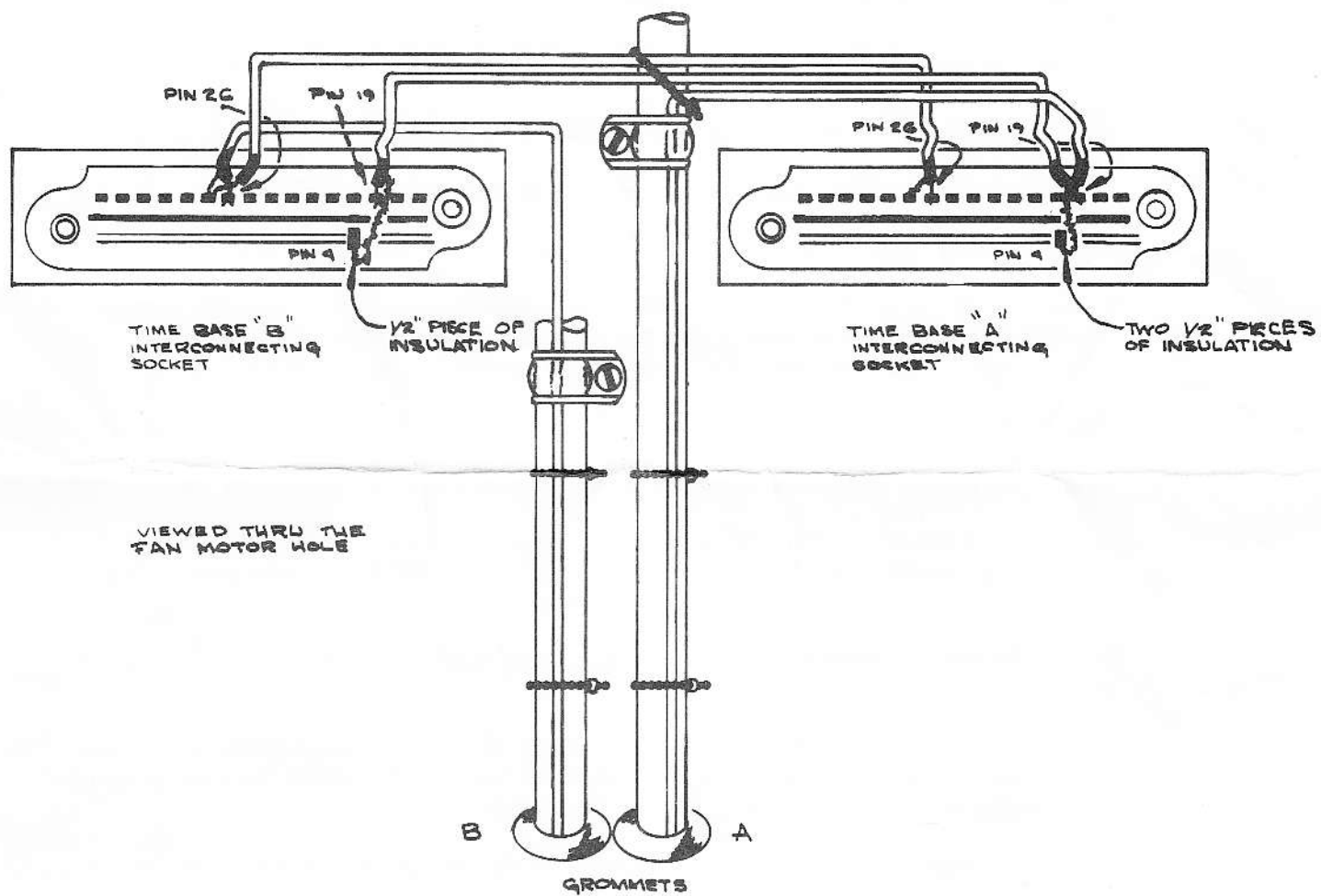


FIG. 2

INSTRUCTIONS (cont)

REFER TO FIG. 2 WHILE PERFORMING STEPS 14 THROUGH 20

- (✓) 14. Fasten the coax cables (passing through upper chassis side of grommets A and B) to the wiring cables with four blue ties (cut off excess tie) from the kit.
- (✓) 15. Replace both 3/8 in. plastic cable clamps with the 7/16 in. cable clamps (from kit), passing both coax cables (installed in steps 5 and 10) through the 7/16 in. cable clamps.
- (✓) 16. Solder the center conductor of the coax cable from grommet A to pin 19 and the exposed braid with a 1/2 in. piece of #10 black vinyl tubing (from kit) over it to pin 4 of TIME BASE A interconnecting socket.
- (✓) 17. Solder the center conductor of the coax cable from grommet B to pin 26 and the exposed braid (no insulation) to pin 27 of TIME BASE B interconnecting socket.
- (✓) 18. Solder a 9-1/2 in. piece of coax (from kit) between pin 19 of TIME BASE B interconnecting socket and pin 19 of TIME BASE A interconnecting socket with the exposed braid on each end insulated by a 1/2 in. piece of #10 black vinyl tubing (from kit) and solder to pin 4 of each interconnecting socket.
- (✓) 19. Solder the remaining 9-1/2 in. piece of coax (from kit) between pin 26 of each interconnecting socket with the exposed braid being soldered to pin 27 of each interconnecting socket.
- (✓) 20. Fasten the three coax cables to the main cable (from grommet A) with a blue cable tie from the kit.
- () 21. Re-install the fan motor assembly (removed in step 2), connecting the wires to the proper ceramic strip notches.
- () 22. Replace all parts removed in step 1.

NOTE: If the Types 21 and 22 TIME BASE units are used with a Type 555 having this modification, perform step 23 on both the Type 21 and Type 22.

- () 23. Remove the white-gray wire connected between pin 19 of the interconnecting plug and the ceramic strip notch above V152.

No modification to the Types 21A and 22A TIME BASE units is necessary.

THIS COMPLETES THE INSTALLATION.

- () Check wiring for accuracy.
- () Moisten the back of the MODIFIED INSTRUMENT tag (from kit) and place it on the Manual schematic page affected by this modification.

BE:ls

ADDITIONAL TRIGGER SOURCES

Type 555 -- SN 101-6999

Installed in Type 555 SN _____ Date _____

GENERAL INFORMATION

This modification installs coax cables between the interconnecting sockets of the Type 555. These coax cables provide the necessary signal path to allow the PLUG-IN positions of the Type 21A and 22A TRIGGER SOURCE switches to be utilized in conjunction with Type 1A1 or 1A2 vertical plug-ins.

The use of these additional sources allows display of the input signals in their true time or phase relationships.

CAUTION: If Type 21 and 22 (rather than Type 21A and 22A) TIME BASE units are used with this modified instrument, make certain the white-gray wire (between pin 19 of the interconnecting plug and the ceramic strip notch above V152) is removed on both units.

CIRCUIT DESCRIPTION

Triggering signals are passed from Channel 1 of the LOWER BEAM and UPPER BEAM Type 1A1 or 1A2 vertical plug-in units to the Type 21A/22A sweep units via the interconnecting plugs and 92Ω coax. These trigger signals are then selected by a TRIGGER SOURCE switch on the Type 21A and 22A.

MECHANICAL PARTS LIST

Part Number	Description
006-0531-00	Tie, nylon, cable, blue
343-0005-00	Clamp, cable, plastic, 7/16 in.

SCHEMATICS

