

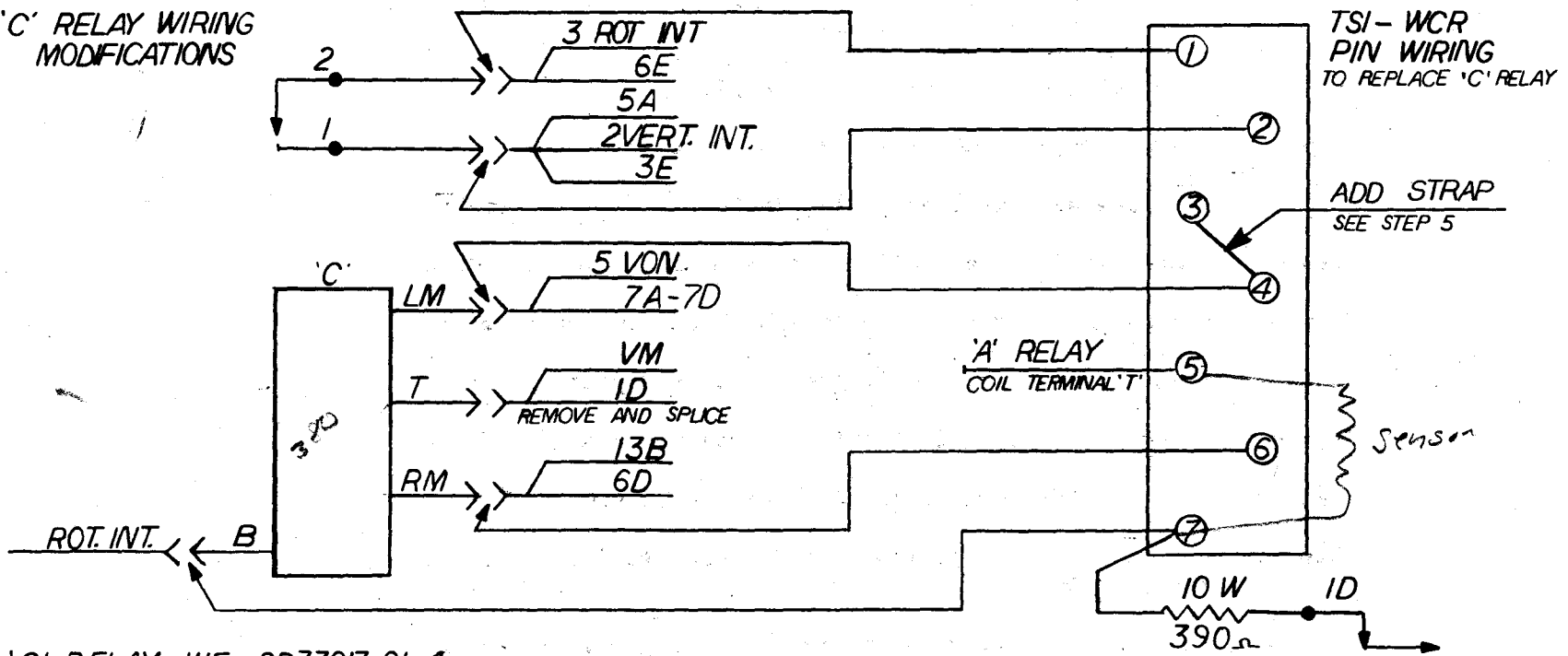
221CR

78
13
14

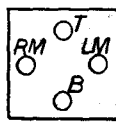
WCR RELAY

INSTALLATION INFORMATION FOR
TSI WCR ELECTRONIC PULSING RELAY
ON WE SXS LINE FINDER SWITCHES

'C' RELAY WIRING
MODIFICATIONS



'C' RELAY WE SD33013-01-4



COIL TERMINAL DESIGNATIONS
AS SEEN FROM REAR OF SWITCH.

add 2928

TSI TELCO SYSTEMS, INC.	
P.O. BOX 7654 WACO, TX.	
TITLE INSTALLATION INSTRUCTIONS WCR RELAY	
DR. BY: <i>Bonnie Blanchard</i>	CHK. BY: _____
TOLERANCE _____	
SCALE _____	
SHEET 1 OF 2	
WE LINE FINDER	

10/15	COIL LAYOUT ADDED STRAP WAS 2 TO 3	2
9/11	PIN 3 WAS GROUND	1
8/15	REMARKS	BY ISS
8-15-83	REVISIONS	ORIGINAL

Installation Information for TSI-WCR Electronic Relay replacing
the "C" Relay in WE line finder switches circuit SD-33013-01

- Step 1 Remove spring contact pileup and armature from "C" relay.
- Step 2 Mount TSI-WCR electronic relay onto the heelpiece using
6-32 X 3/16" screw furnished.
- Step 3 Remove wire(s) from spring 1 and place on pin 2.
- Step 4 Remove wire(s) from spring 2 and place on pin 1.
- Step 5 Add strap wire from pin 3 to pin 4.
- Step 6 Remove wire(s) from coil terminal LM and place on pin 4.
- Step 7 Remove wire(s) from coil terminal T and splice together.
- Step 8 Remove wire(s) from coil terminal RM and place on pin 6.
- Step 9 Remove wire from coil terminal B and place on pin 7.
- Step 10 Place wire from pin 5 to 'A' relay coil terminal T.
- Step 11 Add 390 ohm resistor (furnished) from pin 7 to spring 1
of relay "D".
- Step 12 Coil will no longer be in the circuit and may be removed
or left in place.

NOTE: This installation information is based on WE line finders
wired per circuit SD-33013-01-4.

Should your circuit be wired differently or there be any
question or additional information needed please call
Dale Briggs at 1-800/433-3337.



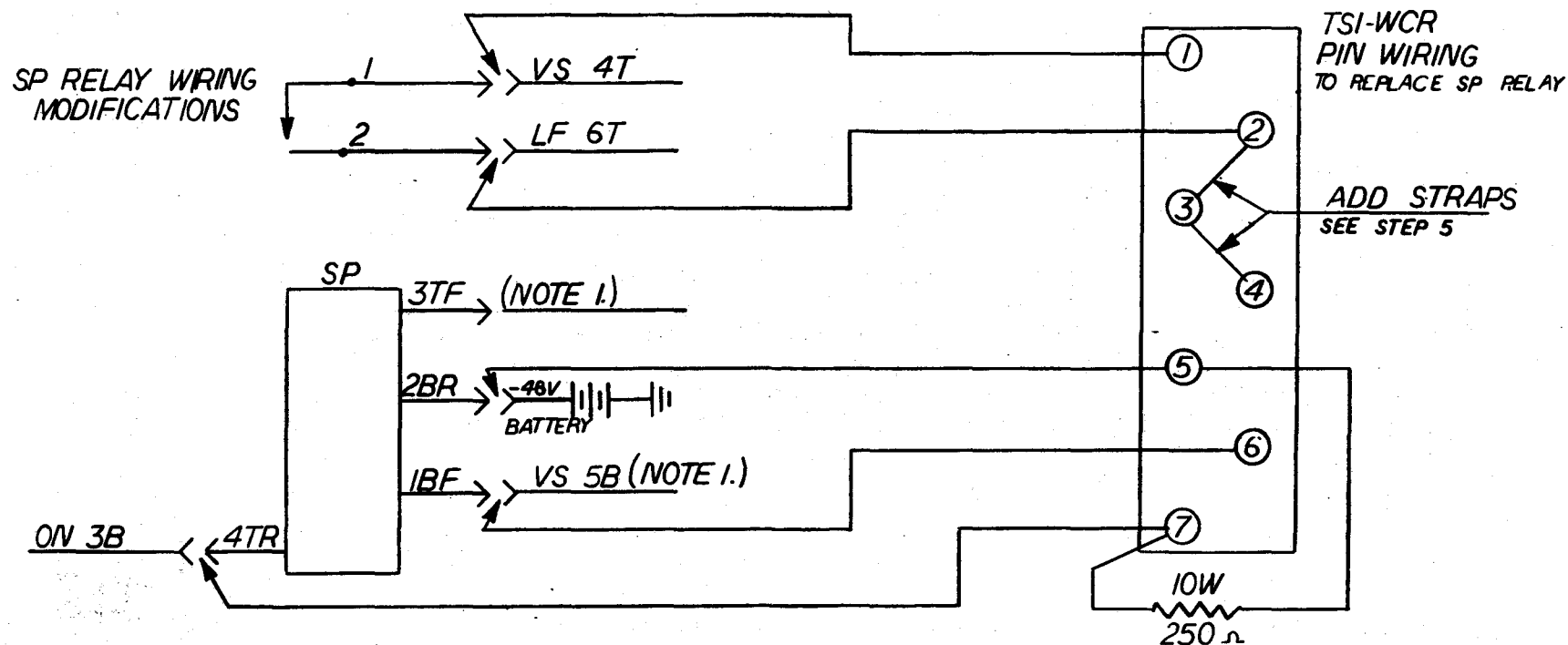
Telco Systems, Inc.
Dale Briggs, Nat'l. Sales Mgr.
817-752-3415
In WATS: 800-433-3337
P.O. Box 7654
Waco, Texas 76714-7654

10/15/83

SD-31922-011
ISS 19

WCR RELAY

INSTALLATION INFORMATION FOR TSI-WCR ELECTRONIC PULSING RELAY ON WE SXS LINE FINDER CONTROL CIRCUIT



SP RELAY WE SD-31922 011 ISS 19
LINE FINDER CONTROL CIRCUIT

NOTE 1. REMOVE "H" AND "J" WIRING.

2. WHEN USED ON SD-31731-011 REMOVE "ZB" WIRING.

NOTE: WHEN MOVING WIRES MAKE CERTAIN CONTINUITY OF OTHER WIRES IS MAINTAINED.

TSI TELCO SYSTEMS, INC.	
P.O. BOX 7654 WACO, TX.	
TITLE INSTALLATION INSTRUCTIONS WCR RELAY	
DR. BY: <i>Bonnie Stanchard</i>	"SP" RELAY
WE RELAY LINE FINDER CONTROL CIRCUIT	

11/8	ADDED INSTALLATION INSTRUCTIONS, ISS 19	1
DATE	REMARKS	ISS
10-18-83 REVISIONS ORIG.		

TSI-WCR ELECTRONIC RELAY

Installation Information for TSI-WCR Electronic Relay replacing the SP Relay in WE line finder control circuit SD-31922-011 ISS 19

- Step 1 Mount TSI-WCR electronic relay below relay cover using double sided tape.
- Step 2 Remove wire(s) from spring 1 and place on pin 1.
- Step 3 Remove wire(s) from spring 2 and place on pin 2.
- Step 4 SP relay will no longer be in the circuit and may be removed or left in place.
- Step 5 Add strap wire from pin 2 to pin 3 & 4.
- Step 6 Remove wire(s) from coil terminal 2BR and place on pin 5.
- Step 7 Remove wire(s) from coil terminal 1BF and place on pin 6.
- Step 8 Remove wire from coil terminal 4TR and place on pin 7.
- Step 9 Add 250 ohm resistor (furnished) from pin 7 to pin 5.

NOTE: This installation information is based on WE line finders control circuit SD-31922-011 ISS. 19

Should your circuit be wired differently or there be any question or additional information needed please call Dale Briggs at 1-800/433-3337.



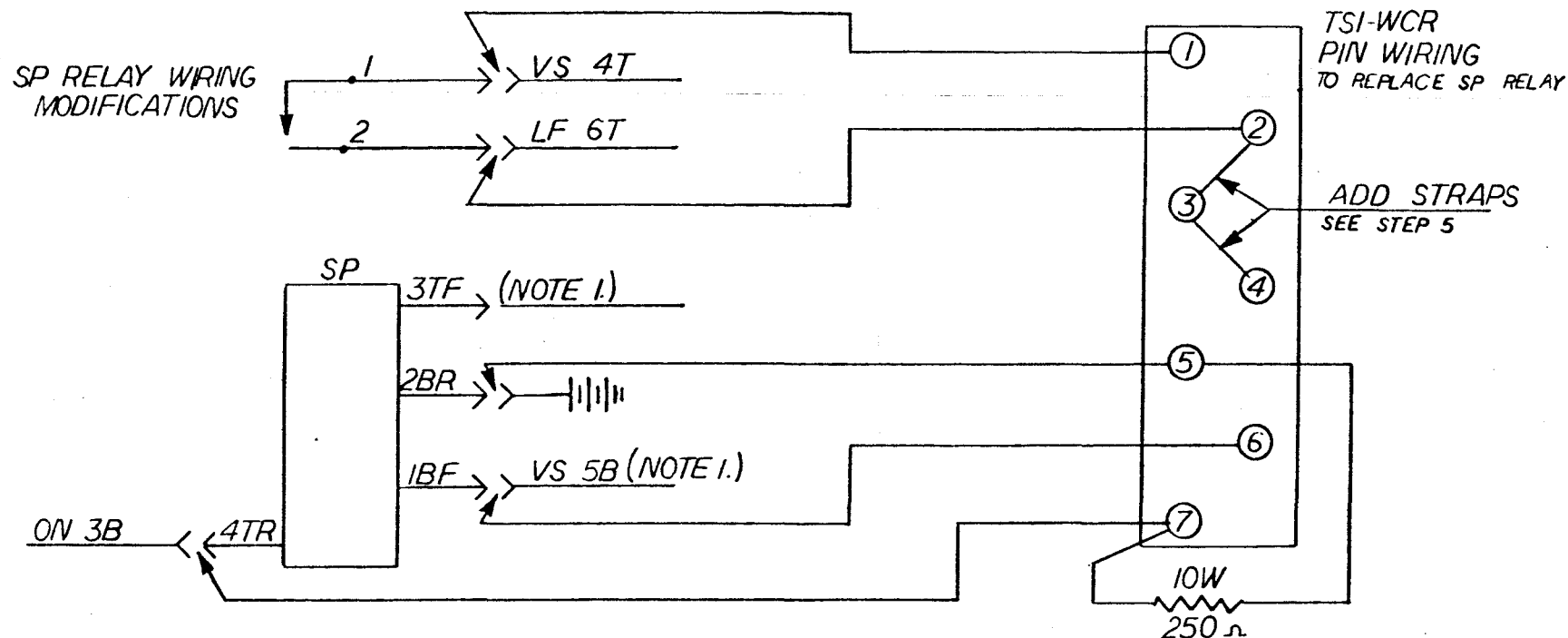
Telco Systems, Inc.
Dale Briggs, Nat'l. Sales Mgr.
817-752-3415
In WATS: 800-433-3337
P.O. Box 7654
Waco, Texas 76714-7654

Reissued 3/20/84

SD-31922-011

WCR RELAY

INSTALLATION INFORMATION FOR
TSI-WCR ELECTRONIC PULSING RELAY
ON WE SXS LINE FINDER CONTROL CIRCUIT



SP RELAY WE SD-31922 011
LINE FINDER CONTROL CIRCUIT

NOTE 1. REMOVE "H" AND "J" WIRING.

TSI TELCO SYSTEMS, INC.
P.O. BOX 7654 WACO, TX.

TITLE
INSTALLATION INSTRUCTIONS
WCR RELAY (SP RELAY)

DR. BY: *Bonnie Blanchard*

CHK. BY:

TOLERANCE

SCALE

SHEET

WE RELAY LINE FINDER
CONTROL CIRCUIT

10-19

REMARKS

ISS

CHK.

10-18-83 REVISIONS ORIG.

Installation Information for TSI-WCR Electronic Relay replacing
the SP Relay in WE line finder control circuit SD-31922-011

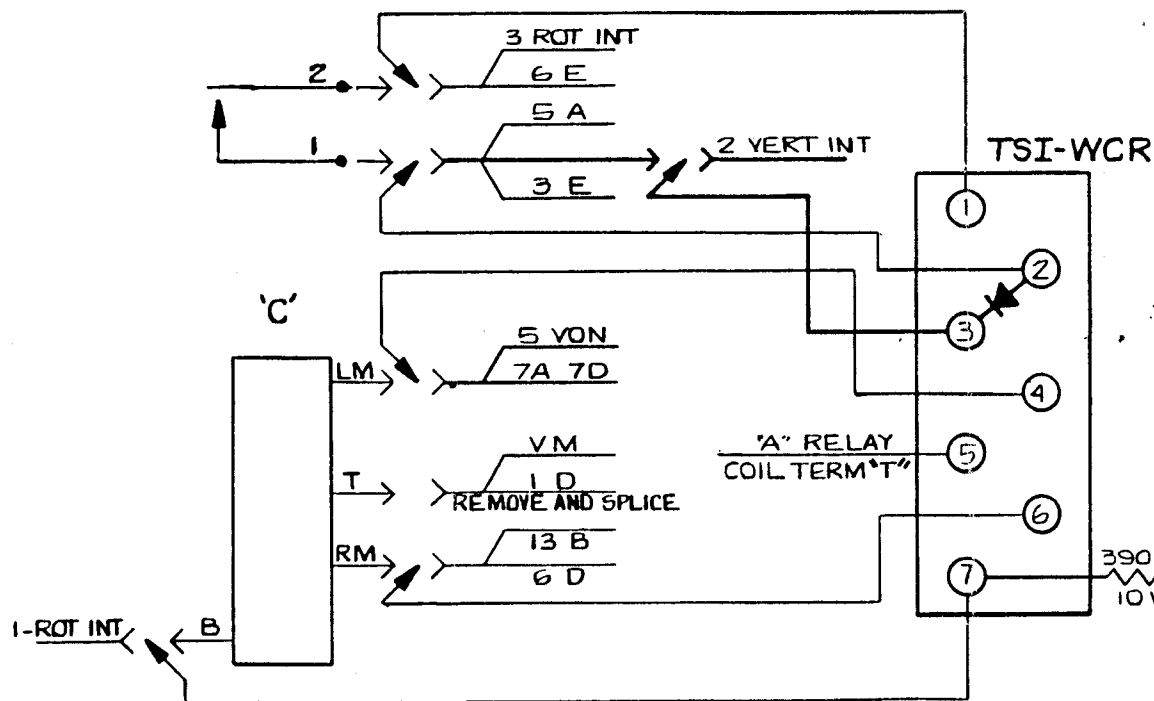
- Step 1 Mount TSI-WCR electronic relay below relay cover using double sided tape.
- Step 2 Remove wire(s) from spring 1 and place on pin 1.
- Step 3 Remove wire(s) from spring 2 and place on pin 2.
- Step 4 SP relay will no longer be in the circuit and may be removed or left in place.
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- Step 6 Remove wire(s) from coil terminal 2BR and place on pin 5.
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- Step 9 Add 250 ohm resistor (furnished) from pin 7 to pin 5.

NOTE: This installation information is based on WE line finders
control circuit SD-31922-011 ISS. 19

Should your circuit be wired differently or there be any
question or additional information needed please call
Dale Briggs at 1-800/433-3337.

WCR RELAY INSTALLATION INFORMATION FOR TSI-WCR ELECTRONIC PULSING RELAY ON WE SXS LINE FINDER CIRCUITS.

SD-33013-01-4 ISS. 10



Installation Procedure

1. Remove and tag all wires from springs 1 and 2 of the "C" relay.
2. Remove spring contact pileup and armature from "C" relay.
3. Mount TSI-WCR electronic relay onto the heelpiece using mounting screw furnished.
4. Place wires tagged 5A and 3E from spring 1 on pin 2.
- 4A. Place wire tagged "2 VERT INT" from spring 1 on pin 3.
5. Place tagged wire from spring 2 on pin 1.
6. Add diode (furnished) wired as shown from pin 2 to pin 3.
7. Remove wire(s) from coil terminal "LM" and place on pin 4.
8. Remove wire(s) from coil terminal "T" and splice together.
9. Remove wire(s) from coil terminal "RM" and place on pin 6.
10. Remove wire from coil terminal "B" and place on pin 7.
11. Place strap wire from WCR relay pin 5 to "A" relay coil terminal T.
12. Add 390 ohm resistor (furnished) from pin 7 to spring 1 of relay "D".
13. Coil will no longer be in the circuit and may be removed or left in place.

Should your circuit be wired differently or there be any questions or additional information needed, please call Dale Briggs at 800-433-3337; in Texas call 800-792-3441.

WHERE THE INSTRUCTIONS CALL FOR MOVING A WIRE MAKE CERTAIN THAT ALL WIRES ON THAT TERMINAL ARE MOVED AND RECONNECTED WHERE SPECIFIED.

TSI TELCO SYSTEMS, INC.
P.O. BOX 7654 WACO, TX.

1/85	PINS 3 & 4 WERE STRAPPED, 2 VERT INT WAS WIRED TO PIN 2, DIODE ADDED TO PIN 2 & 3	2	TITLE INSTALLATION INSTRUCTIONS WCR RELAY	
5/84	REDRAWN	1	CRAIG W. BLANCHARD	SD-33013-01-4 ISS 10
DATE	REMARKS	ISS	WE LINE FINDER	
REVISIONS		D-15-83	C' RELAY	

Installation Information for TSI-WCR Electronic Relay replacing
the "C" Relay in WE line finder switches circuit SD-33013-01

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10/15/83