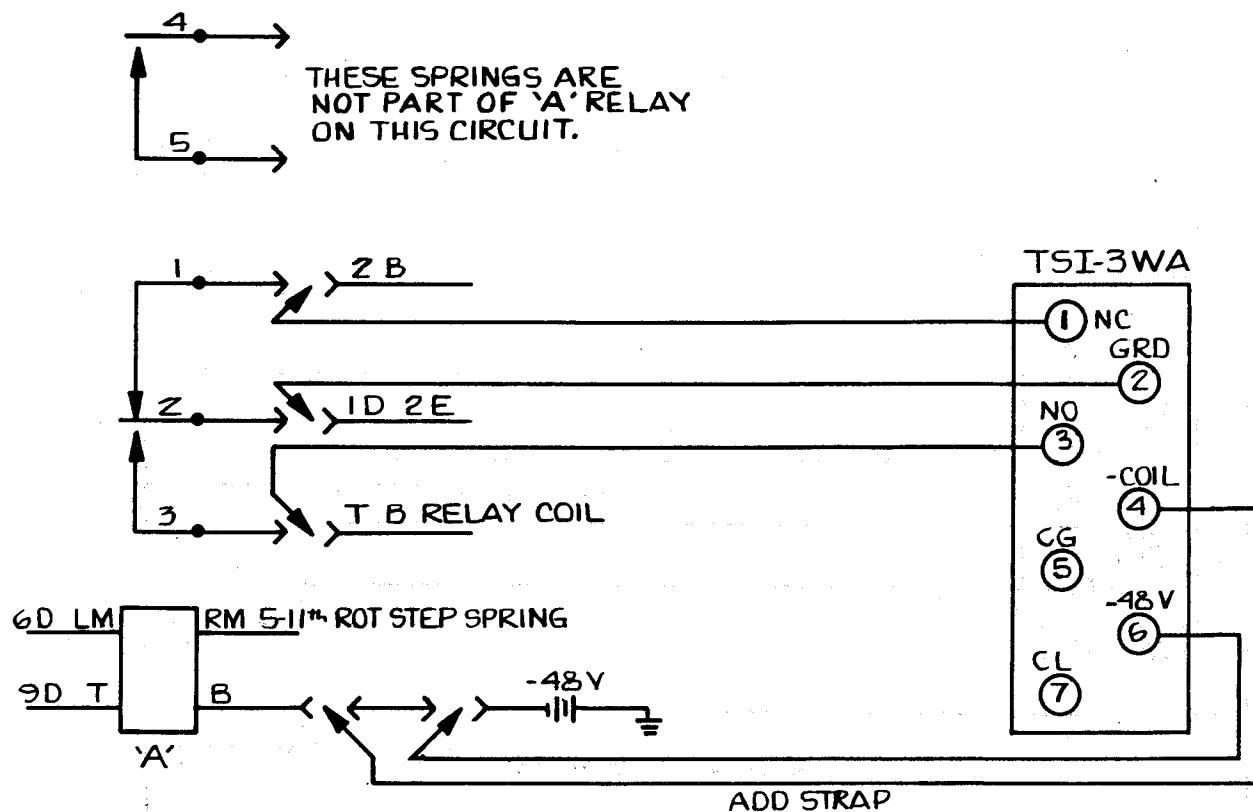
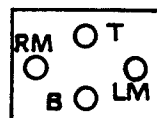


3WA RELAY INSTALLATION INFORMATION FOR TSI-3WA ELECTRONIC PULSING RELAY ON WE SXS SELECTORS WITH 5 SPRING 'A' RELAY.

SD-30200-01-1 ISS.23 B



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



'A' RELAY
COIL TERMINAL
DESIGNATIONS AS
SEEN FROM REAR
OF SWITCH.

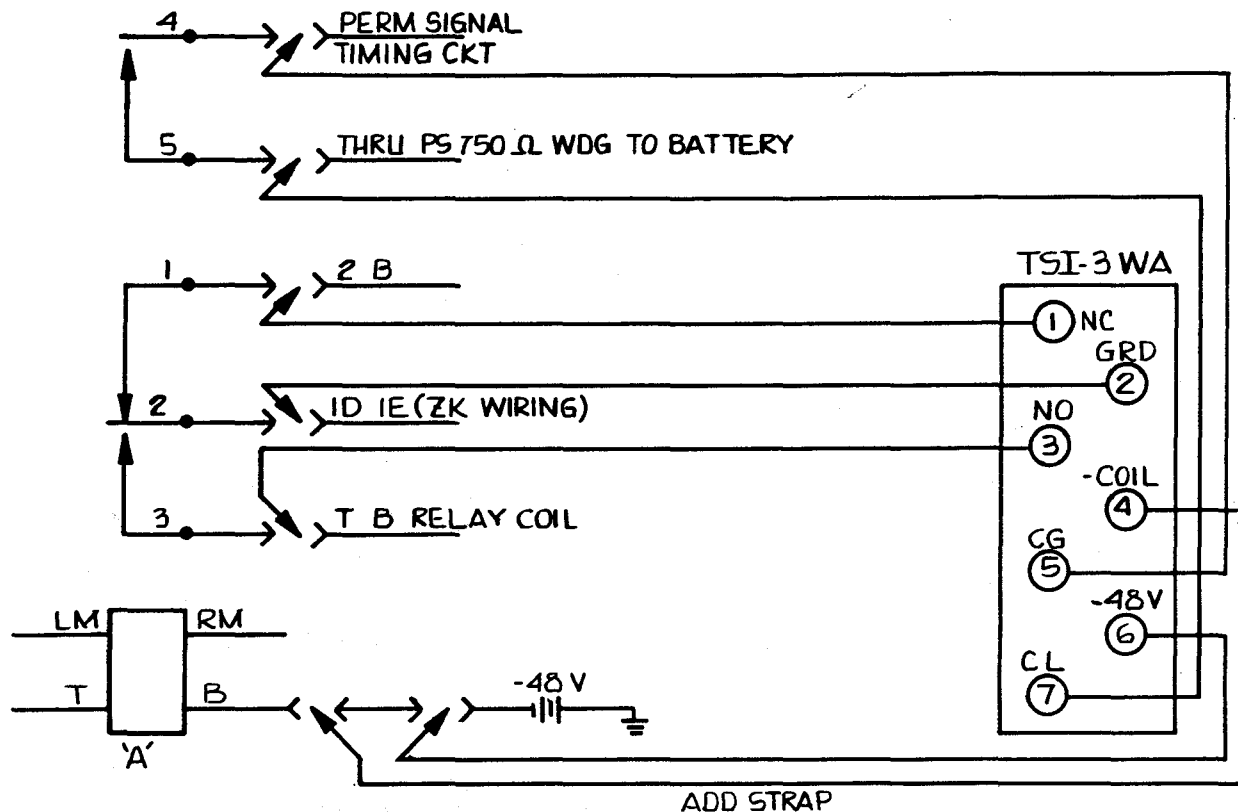
TSI TELCO SYSTEMS, INC.	
P.O. BOX 7654 WACO, TX.	
TITLE INSTALLATION INSTRUCTIONS 3 WA RELAY	
7/84 DATE	1 ISS.
DRAWN REMARKS	
CRAIG W. BLANCHARD SD-30200-01-1 ISS.23B	
7-1-84	'A' RELAY
WE SXS SELECTORS	

7/84	DRAWN	1
DATE	REMARKS	ISS.
REVISIONS		

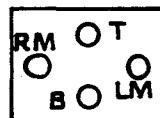
3WA RELAY

INSTALLATION INFORMATION FOR
TSI-3WA ELECTRONIC PULSING
RELAY ON WE SXS SELECTORS
WITH 5 SPRING 'A' RELAY.

SD-30976-01-1 155.23 B



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



'A' RELAY
COIL TERMINAL
DESIGNATIONS AS
SEEN FROM REAR
OF SWITCH.

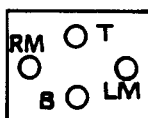
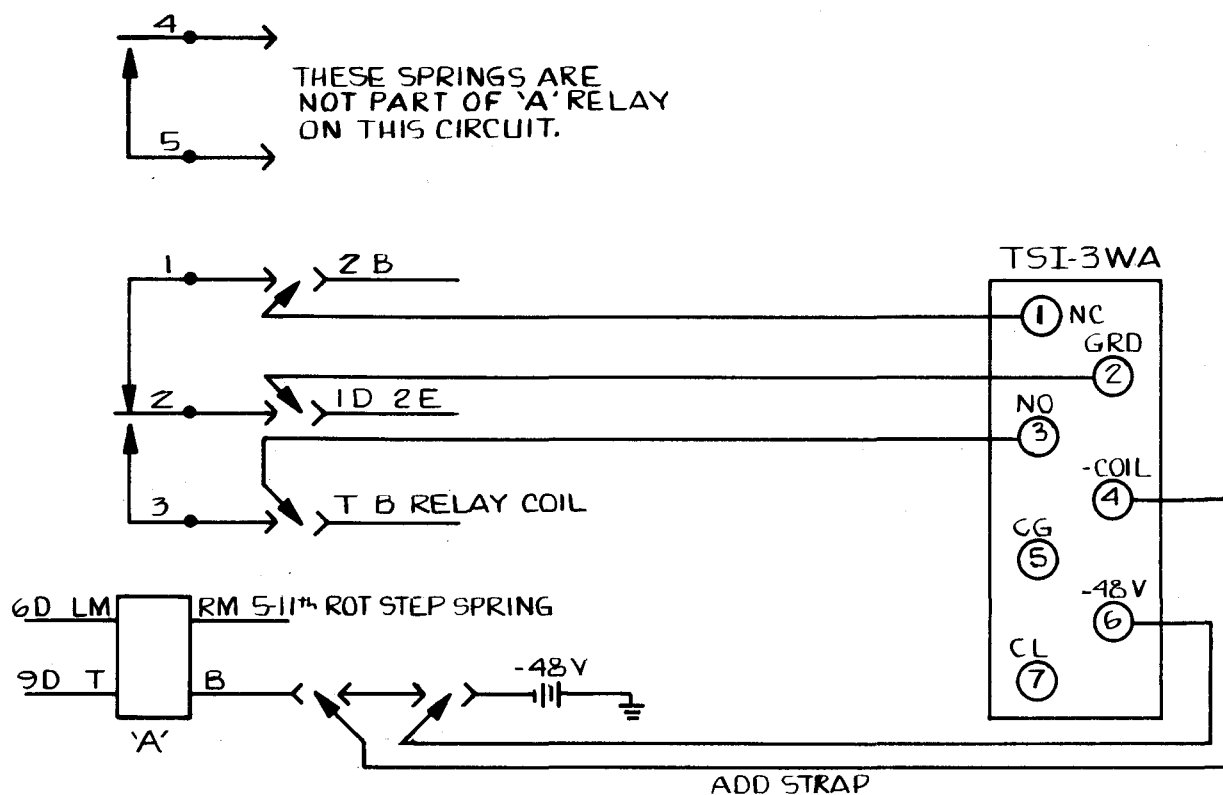
TSI TELCO SYSTEMS, INC.
P.O. BOX 7654 WACO, TX.

TITLE	
INSTALLATION INSTRUCTIONS 3 WA RELAY	
CRAIG W. BLANCHARD	SD-30976-01-1 155.23 B
7-1-84	'A' RELAY WE SXS SELECTORS

7/84	DRAWN	1
DATE	REMARKS	ISS
REVISIONS		

3WA RELAY INSTALLATION INFORMATION FOR TSI-3WA ELECTRONIC PULSING RELAY ON WE SXS SELECTORS WITH 5 SPRING "A" RELAY.

SD-30200-01-1 ISS. 29 B



'A' RELAY
COIL TERMINAL
DESIGNATIONS AS
SEEN FROM REAR
OF SWITCH.

INSTALLATION PROCEDURE 'A' RELAY REPLACEMENT

1. Remove and tag wires from 'A' relay contact springs 1, 2, and 3.
2. Remove contact spring assembly from heelpiece.
3. Remove armature.
4. Remove cover guide stud from heelpiece and place on relay "C".
5. Install TSI-3WA relay on heelpiece using 6—32 x 7/8" screw provided.
6. Remove negative battery wire from coil terminal 'B' and place on TSI-3WA Pin 6.
7. Add strap from TSI-3WA Pin 4 to negative battery coil terminal 'B'.
8. Pins 5 and 7 of the TSI-3WA relay will not be wired for this application as contact springs 4 and 5 are not a part of this 'A' relay.
9. Make other connections as shown in block diagram under "TSI-3WA."

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

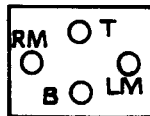
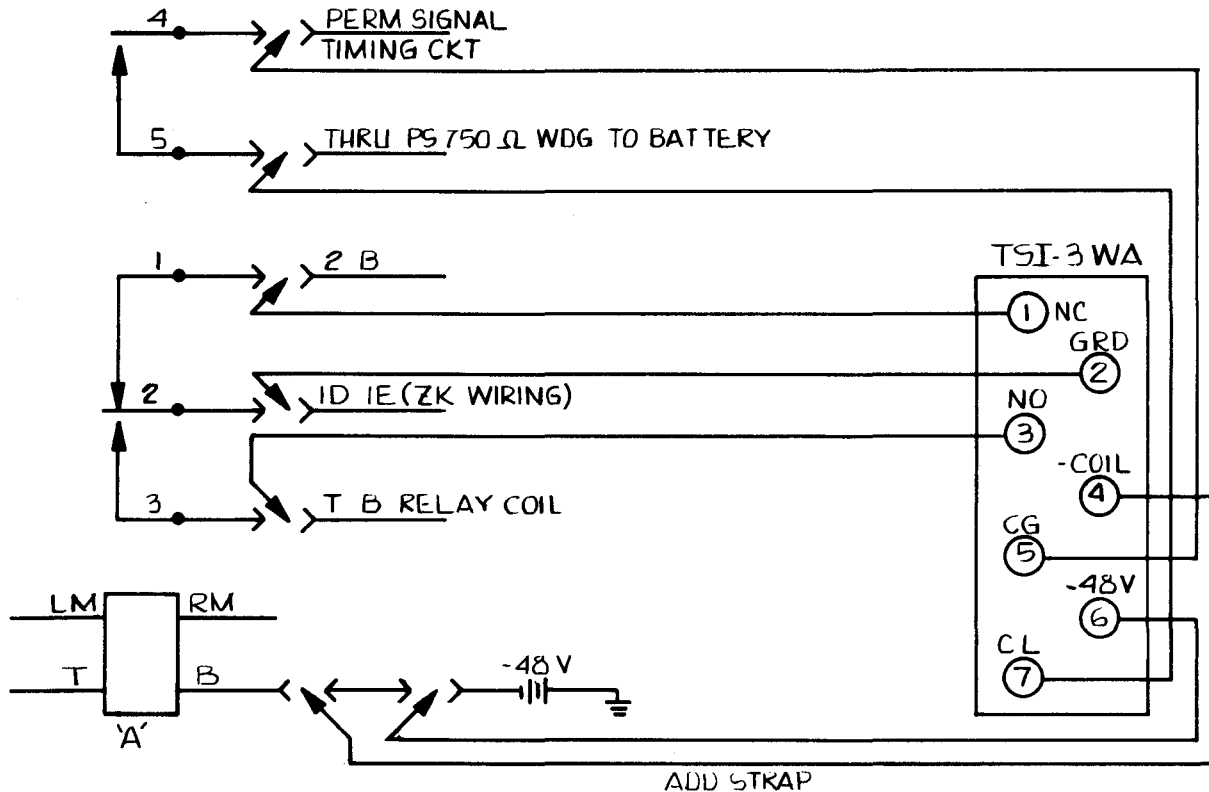
WHERE THE INSTRUCTIONS CALL FOR MOVING A WIRE MAKE CERTAIN THAT ALL WIRES ON THAT TERMINAL ARE MOVED AND RECONNECTED WHERE SPECIFIED.

TSI TELCO SYSTEMS, INC.	
P.O. BOX 7654 WACO, TX.	
TITLE INSTALLATION INSTRUCTIONS 3 WA RELAY	
CRAIG W. BLANCHARD	SD-30200-01-1 ISS. 29B
7-1-84	'A' RELAY WE SXS SELECTORS

7/84	DRAWN	1
DATE	REMARKS	ISS.
REVISIONS		

3WA RELAY INSTALLATION INFORMATION FOR TSI-3WA ELECTRONIC PULSING RELAY ON WE SXS SELECTORS WITH 5 SPRING "A" RELAY.

SD-30976-01-1 155.23 B



'A' RELAY
COIL TERMINAL
DESIGNATIONS AS
SEEN FROM REAR
OF SWITCH.

INSTALLATION PROCEDURE 'A' RELAY REPLACEMENT

1. Remove and tag wires from 'A' relay contact springs 1 through 5.
2. Remove contact spring assembly from heelpiece.
3. Remove armature.
4. Remove cover guide stud from heelpiece and place on relay "C".
5. Install TSI-3WA relay on heelpiece using 6—32 x 7/8" screw provided.
6. Remove negative battery wire from coil terminal 'B' and place on TSI-3WA Pin 6.
7. Add strap from TSI-3WA Pin 4 to negative battery coil terminal 'B'.
8. Make other connections as shown in block diagram under "TSI-3WA."
9. Wires from contact springs 4 and 5 are shown for ZL wiring. For ZM wiring reverse terminations on TSI-3WA pins 5 and 7.

Should your circuit be wired differently or there be any questions or additional information needed, please call Bob Forsythe 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.

TITLE
INSTALLATION INSTRUCTIONS
3 WA RELAY

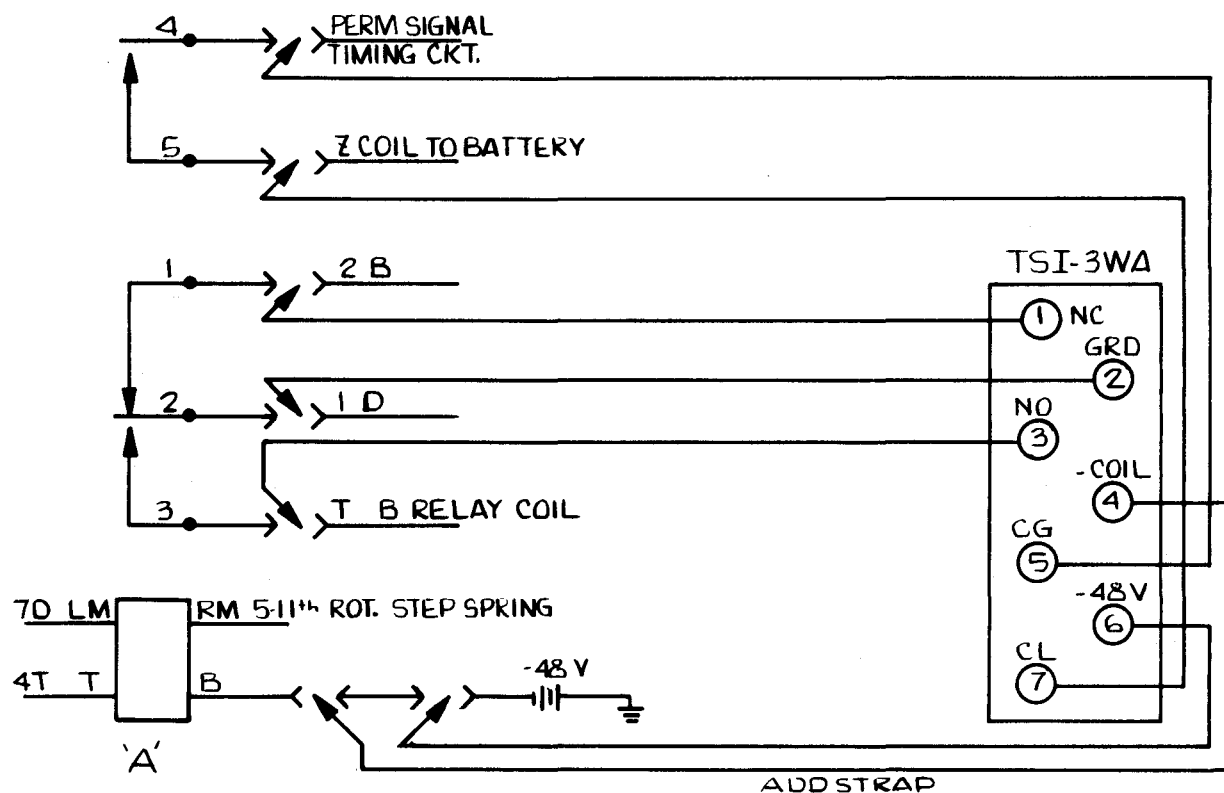
CRAIG W. BLANCHARD SD-30976-01-1 155.23 B

7/81	DRAWN	1
DATE	REMARKS	ISS
REVISIONS		

7-1-84	'A' RELAY	WE SXS SELECTORS
--------	-----------	------------------

3WA RELAY INSTALLATION INFORMATION FOR TSI-3WA ELECTRONIC PULSING RELAY ON WE SXS SELECTORS WITH 5 SPRING "A" RELAY.

SD-32077-01-2 195.18D

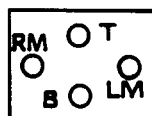


INSTALLATION PROCEDURE 'A' RELAY REPLACEMENT

1. Remove and tag wires from 'A' relay contact springs 1 through 5.
2. Remove contact spring assembly from heelpiece.
3. Remove armature.
4. Remove cover guide stud from heelpiece and place on relay "C".
5. Install TSI-3WA relay on heelpiece using 6—32 x 7/8" screw provided.
6. Remove negative battery wire from coil terminal 'B' and place on TSI-3WA Pin 6.
7. Add strap from TSI-3WA Pin 4 to negative battery coil terminal 'B'.
8. Make other connections as shown in block diagram under "TSI-3WA."

Should your circuit be wired differently or there be any questions or additional information needed, please call Bob Forsythe 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.



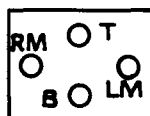
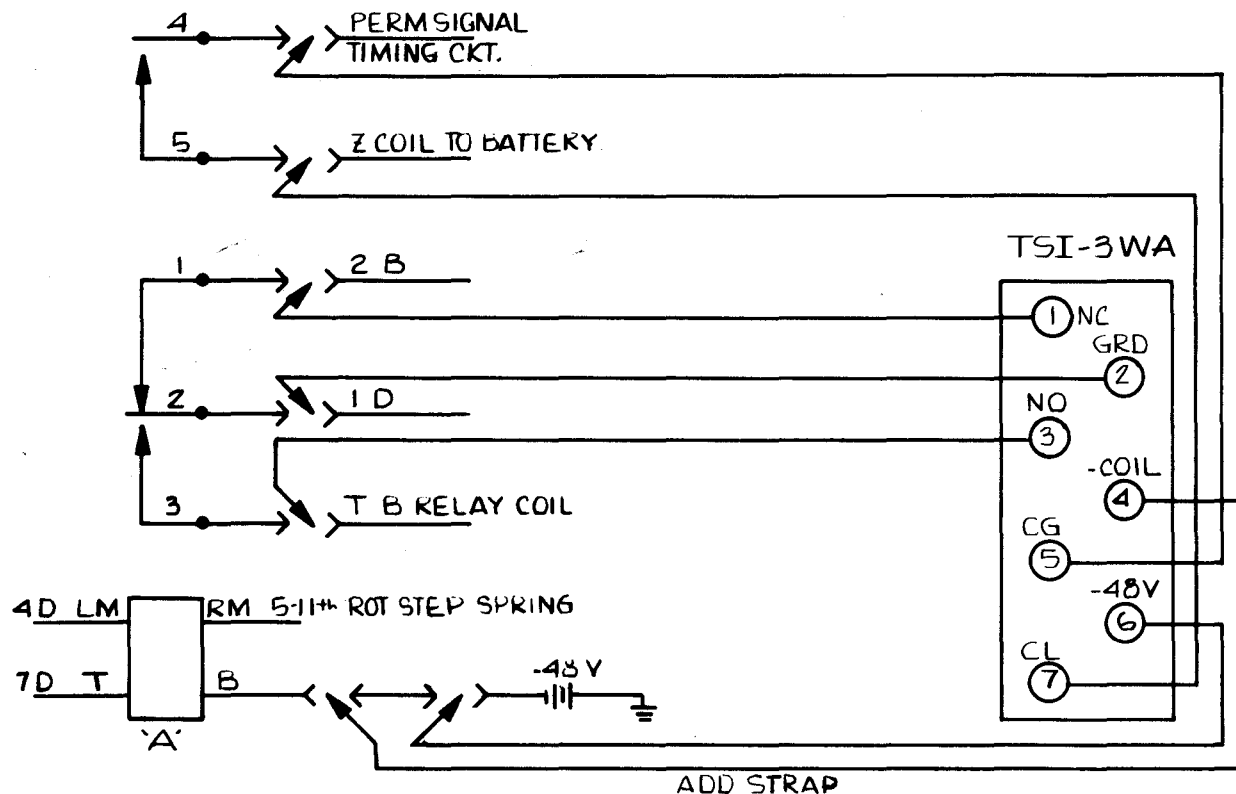
'A' RELAY
COIL TERMINAL
DESIGNATIONS
AS SEEN FROM
REAR OF SWITCH

TSI		TELCO SYSTEMS, INC.	
		P.O. BOX 7654 WACO, TX.	
TITLE			
INSTALLATION INSTRUCTIONS			
3WA RELAY			
7/84		DRAWN	
DATE		REMARKS	
2-1-84		'A' RELAY	
CRAIG W. BLANCHARD		SD-32077-01-2 195.18D	
WE SXS SELECTORS			

7/84	DRAWN	1
DATE	REMARKS	ISS
REVISIONS		

3WA RELAY INSTALLATION INFORMATION FOR TSI-3WA ELECTRONIC PULSING RELAY ON WE SXS SELECTORS WITH 5 SPRING 'A' RELAY.

SD-33003-01-1 155,8 D



'A' RELAY
COIL TERMINAL
DESIGNATIONS AS
SEEN FROM REAR
OF SWITCH.

INSTALLATION PROCEDURE 'A' RELAY REPLACEMENT

1. Remove and tag wires from 'A' relay contact springs 1 through 5.
2. Remove contact spring assembly from heelpiece.
3. Remove armature.
4. Remove cover guide stud from heelpiece and place on relay "C".
5. Install TSI-3WA relay on heelpiece using 6—32 x 7/8" screw provided.
6. Remove negative battery wire from coil terminal 'B' and place on TSI-3WA Pin 6.
7. Add strap from TSI-3WA Pin 4 to negative battery coil terminal 'B'.
8. Make other connections as shown in block diagram under "TSI-3WA."

Should your circuit be wired differently or there be any questions or additional information needed, please call Bob Forsythe 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.

TITLE
INSTALLATION INSTRUCTIONS
3 WA RELAY

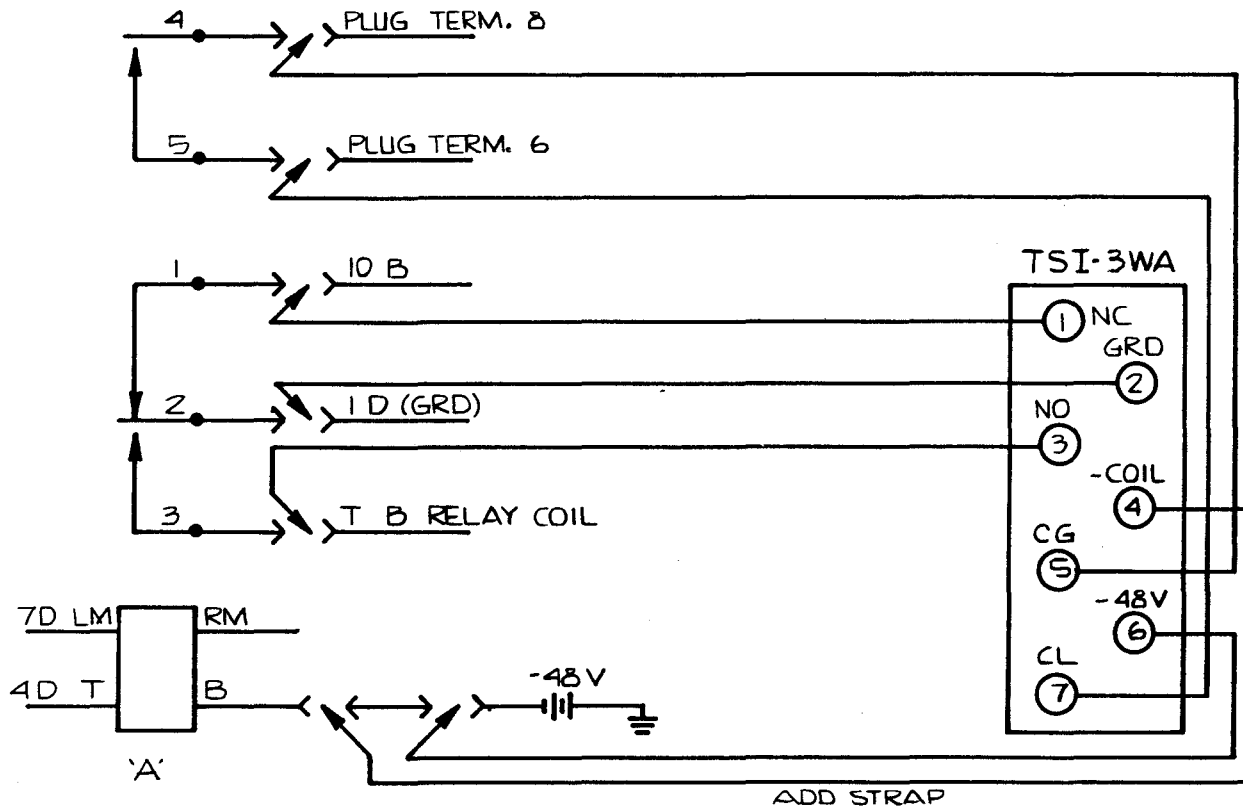
CRAIG W. BLANCHARD SD-33003-01-1 155,8 D

7/84	DRAWN	1
WVE	REMARKS	ISS
REVISIONS		

7-1-84 'A' RELAY WE SXS SELECTORS

3WA RELAY INSTALLATION INFORMATION FOR TSI-3WA ELECTRONIC PULSING RELAY ON WE SXS SELECTORS WITH 5 SPRING 'A' RELAY.

ED-32183-31 155.10



INSTALLATION PROCEDURE

1. Remove and tag all wires from 'A' relay contact springs 1 through 5.
2. Remove contact spring assembly and armature from heelpiece.
3. Remove cover guide stud from heelpiece and install on relay 'C'.
4. Install TSI-3WA relay on heelpiece using mounting screw provided.
5. Remove battery wires from coil terminal 'B' and place on TSI-3WA relay pin 6.
6. Add strap from 3WA relay pin 4 to wire terminal 'B'.
7. Connect tagged wires 1-5 to TSI-3WA relay as shown in block diagram. Tagged wire spring 1 to pin 1.
spring 2 to pin 2.
spring 3 to pin 3.
spring 4 to pin 5.
spring 5 to pin 7.

Should your circuit be wired differently or there be any questions or additional information needed, please call Bob Forsythe 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.

RM ○ T
○ ○
B ○ LM

'A' RELAY
COIL TERMINAL
DESIGNATIONS
AS SEEN FROM
REAR OF SWITCH.

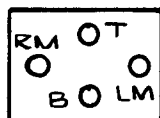
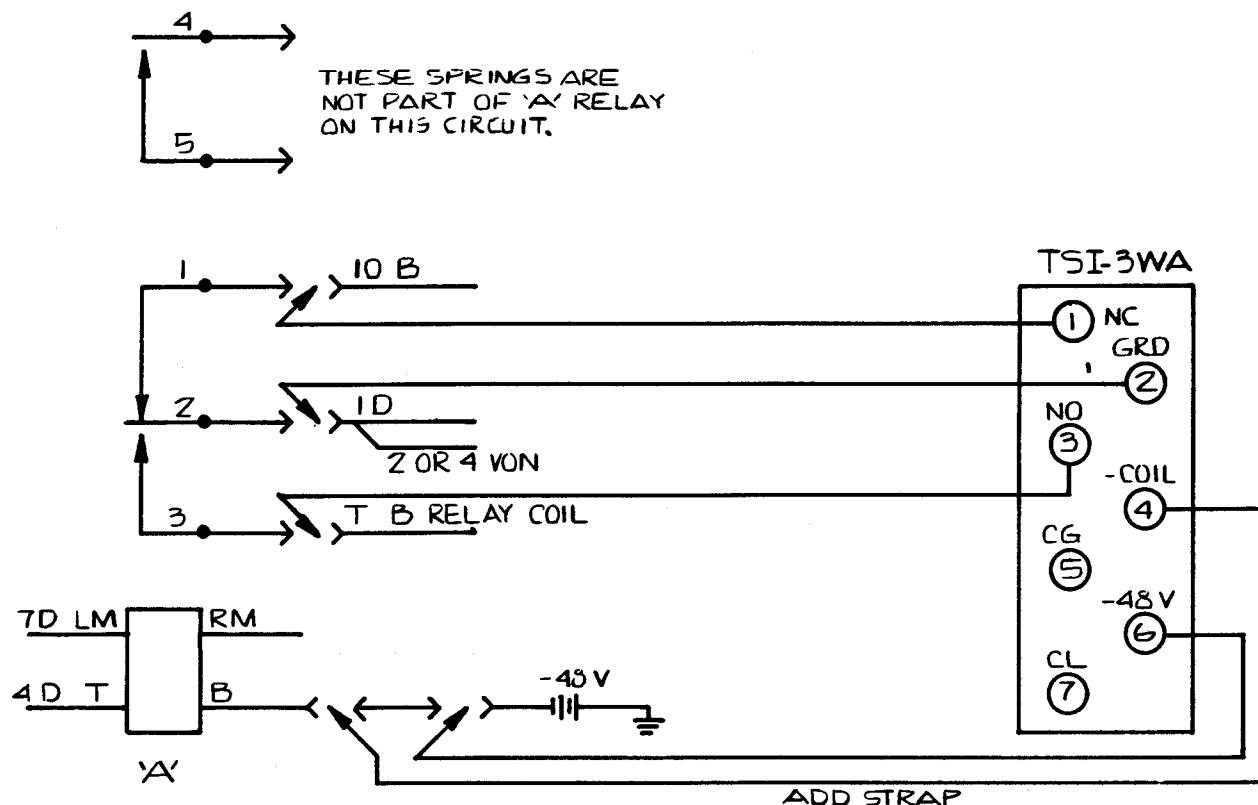
TSI TELCO SYSTEMS, INC.
P.O. BOX 7654 WACO, TX.

TITLE	
INSTALLATION INSTRUCTIONS 3 WA RELAY	
CRAIG W. BLANCHARD	ED-32183-31 155.10
12-13-84	'A' RELAY
WE SXS SELECTORS	

12 84	NEW DRAWING	1
DATE	REMARKS	155
REVISIONS		

3WA INSTALLATION INFORMATION FOR TSI-3WA ELECTRONIC PULSING RELAY ON WE 5X5 SELECTORS WITH 3 SPRING A RELAY.

ED-32183-30 155 17



'A' RELAY
COIL TERMINAL
DESIGNATIONS
AS SEEN FROM
REAR OF SWITCH

INSTALLATION PROCEDURE **3 Spring 'A' Relay Replacement** Using the TSI-3WA 5 Contact Electronic Relay

1. Remove and tag all wires from 'A' relay contact springs 1 through 3.
2. Remove contact spring assembly from heelpiece.
3. Remove armature.
4. Remove cover guide stud from heelpiece and place on relay 'C'.
5. Install TSI-3WA relay on heelpiece using screw provided.
6. Remove negative battery wire from coil terminal 'B' and place on TSI-3WA pin 6.
7. Add strap from TSI-3WA pin 4 to negative battery coil terminal 'B'.
8. Make other connections as shown in block diagram under 'TSI-3WA'.
Contact spring 1 to pin 1.
Contact spring 2 to pin 2.
Contact spring 3 to pin 3.

Should your circuit be wired differently or there be any questions or additional information needed, please call Bob Forsythe 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.

TITLE			
INSTALLATION INSTRUCTIONS 3 WA RELAY			
1/55	DRAWN	1	CRAG W. BLANCHARD
DATE	REMARKS	155	ED-32183-30 155 17
REVISIONS			
1-17-85	'A' RELAY	WE 5X5 SELECTORS	