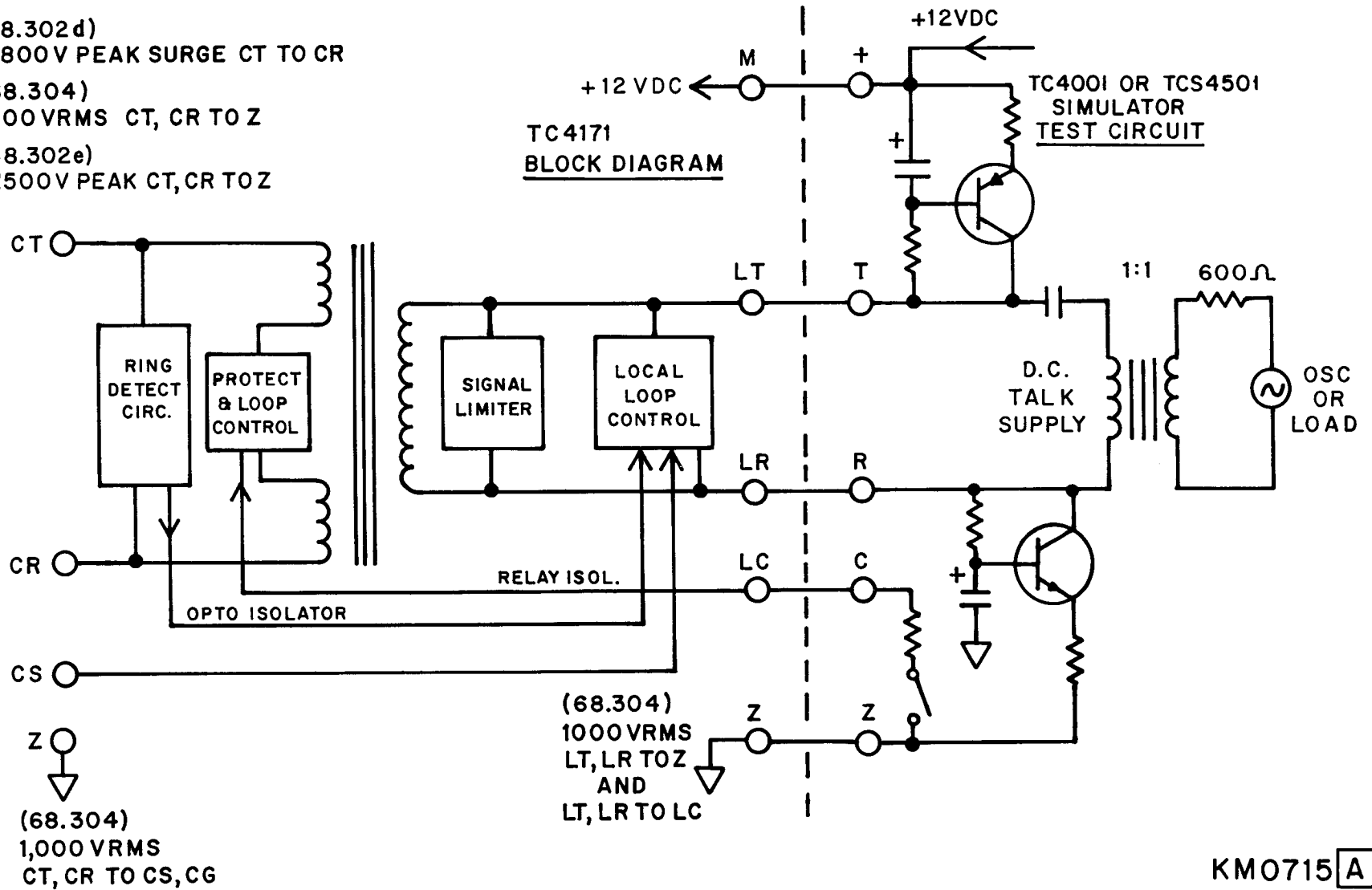


# TC4171 BLOCK DIAGRAM WITH TEST POINTS

(68.302d)  
± 800V PEAK SURGE CT TO CR

(68.304)  
1000 VRMS CT, CR TO Z

(68.302e)  
±1500V PEAK CT, CR TO Z

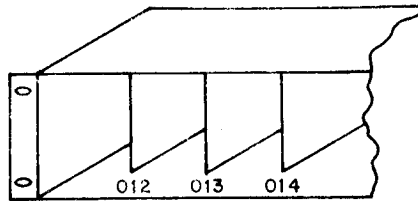


TC4171 (COA) TERM LAYOUT

1	2
KT	AM
KR	M
M	Z
Z	A1
CT	A2
CR	
Z	A3
CS	A4
CG	
LT	
LR	
LC	
XC	
Z	
Z	
29	30

TC4171 (COA)  
WIRING DIAGRAM  
KM0716 C

CHASSIS FRONT VIEW (TC4170)

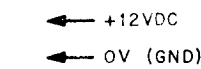
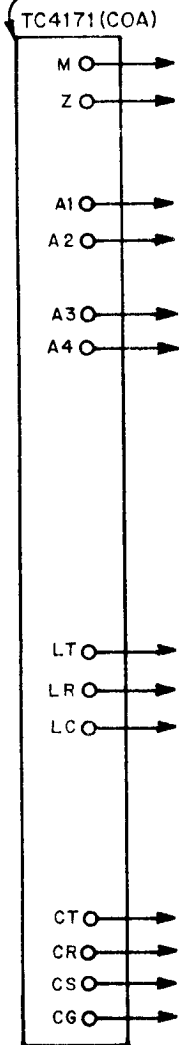


PHYSICAL NUMBERS SHOULD BE MARKED ON CHASSIS BY INSTALLER. LEDS SHOW PRESENCE OF TC4 & C.O. LOOP CURRENTS.

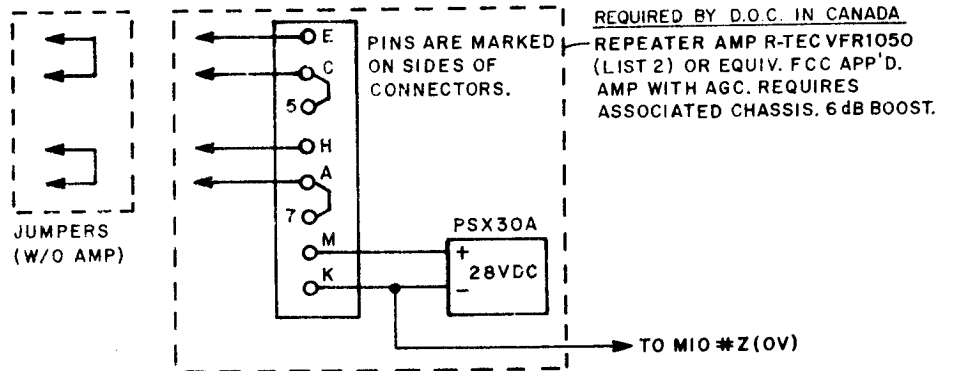
WIRING PROCEDURE

CAUTION: REVIEW INTERCONNECT SECTION OF TC4 MANUAL BEFORE PLANNING OR INSTALLING AN INTERCONNECT SYSTEM. TC4171 FCC REG. NO. = EY65P7-15781-WP-T, RING EQ. NO. = 1.7B

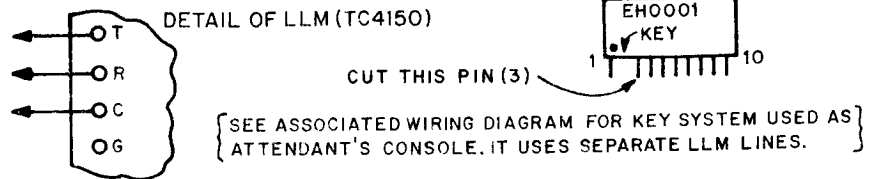
1.) CONNECT ALL COA'S TO 12V POWER, +12V TO PIN 5 (M), COM TO PIN 7 (Z).



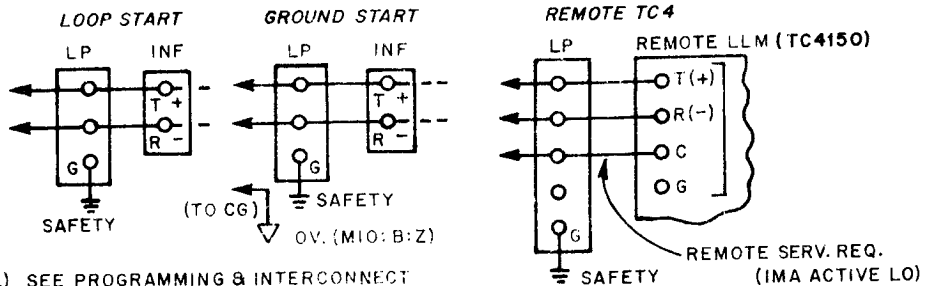
2.) CONNECT REPEATER AMP IF USED, OR ELSE CONNECT JUMPERS.



3.) CONNECT TO AN LLM (TC4150) LINE BASED UPON SYSTEM WORKSHEET & PHYS. NO'S. CHART. CUT PIN 3 ON "UI" LINE HYBRID FOR THIS LLM CIRCUIT (DEFEAT RINGING). MARK PHYS. NO. INSIDE TC4170 (COA) CHASSIS.

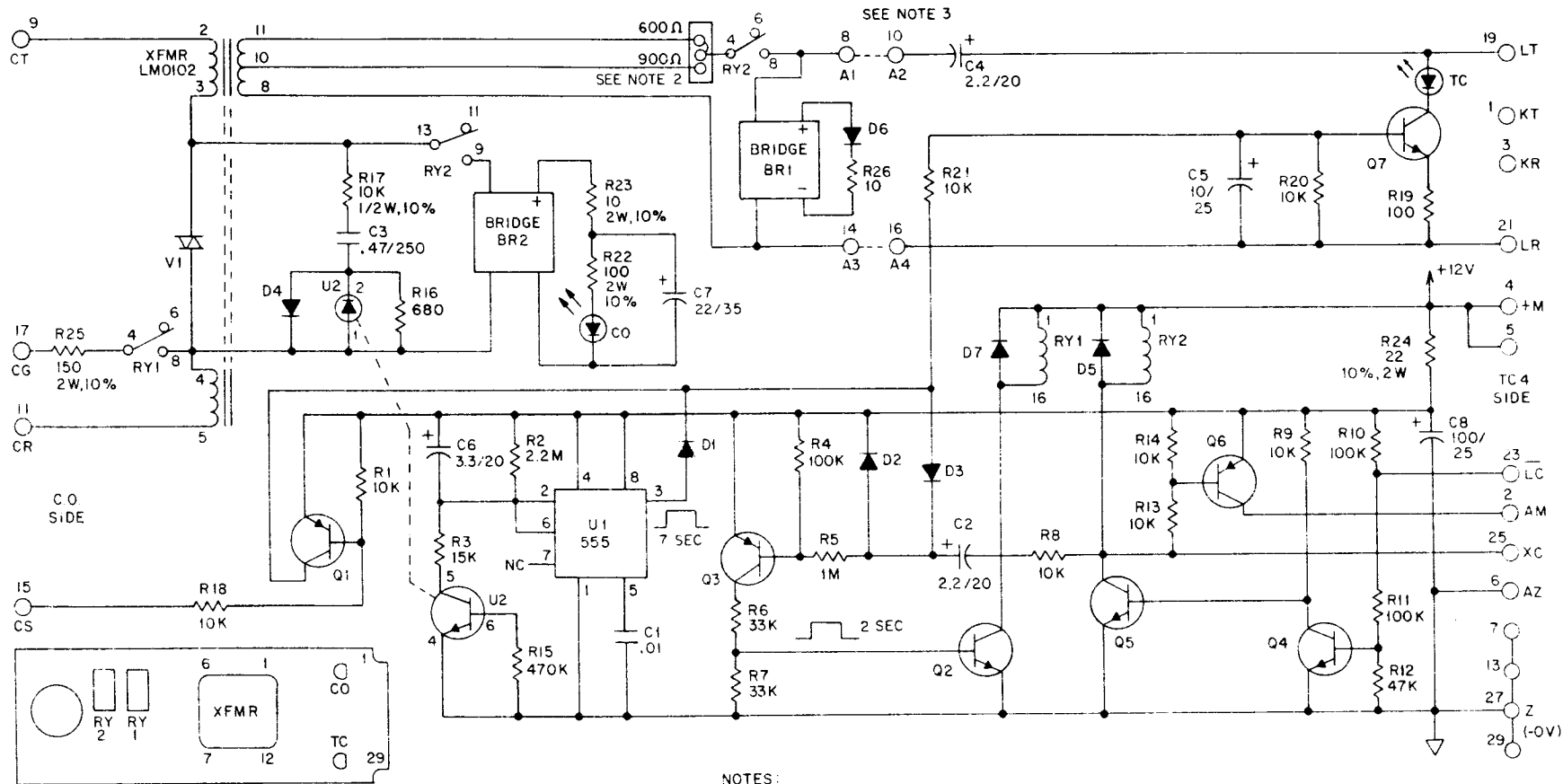


4.) CONNECT TO REMOTE LINE. CHOOSE CIRCUIT DETAIL BELOW:



5.) SEE PROGRAMMING & INTERCONNECT SECTIONS OF MANUAL.

- LP = LIGHTNING PROTECTOR, REQUIRED FOR ANY LINES THAT GO OUTSIDE OF BUILDING UNLESS PROVIDED BY THE TELEPHONE COMPANY. LOCATE NEAR POINT OF ENTRY IN BUILDING WITH GOOD SAFETY GROUND.
- INF = INTERFACE, PROVIDED BY TELEPHONE COMPANY. YOU MAY REQUEST A MODULAR RECEPTACLE PER LINE (RJ11) WHICH CAN BE TESTED BY PLUGGING IN A STANDARD TELEPHONE, OR A 25-PAIR INTERFACE (RJ21X) THAT USES STANDARD 25-PAIR RIBBON CONNECTOR.
- LLM = TC4150 "LINE-LINK MODULE"



<b>KC 1475 E</b>	
<b>5-4-85</b>	
ISS	CHANGE
A	CIRCUIT CHANGE 9-26-85
B	ADDED RY1 & 2 TO COMP.CHART. RESISTORS WERE 10%, EXCEPT WHERE OTHERWISE IN- DICATED. ADDED NOTE 4. 11-12-85
C	R22 WAS 180 Ω. 9-11-86
D	R3 WAS 1K, R16 WAS 1.5K. 1-9-87
E	C6 WAS 2.2, R3 WAS 22K, R15 WAS 100K, V1 WAS JR0109, V2 20ZA- 05. 9-28-88

COMPONENT DESIGNATION	DESCRIPTION
U1	555 TIMER EC0004
U2	4N25 OPTOCOUPLER EC0125
Q1, 3, 6	MPS 6519 PNP TRANSISTOR
Q2, 4, 5	MPS 6515 NPN TRANSISTOR
Q7	MJE 521 NPN TRANSISTOR
DIODES	IN4002
BR1, 2	JR0108 BRIDGE RECTIFIER
V1	JR0116 VARISTOR 270V
RY1, 2	DO259

**NOTES:**

- UNLESS OTHERWISE SPECIFIED ALL RESISTORS ARE RATED IN OHMS, 1/4W, 5%. CAPACITORS ARE RATED IN MICROFARADS.
- SELECT 600 OR 900 OHMS JUMPER BLOCK TO MATCH C.O. SIDE LINE IMPEDANCE.
- JUMPER A1 TO A2 AND A3 TO A4 FOR NORMAL USE. SEE WIRING DIAGRAM KM0716 FOR WIRING IN REPEATER AMP.
- FCC CERTIFICATION:  
EY65P7-15781-WP-T  
RING EQUIV 1.7B

**MODEL TC4171  
(COA)**

RAULAND-BORG CORP.  
CHICAGO, ILL  
MADE IN USA

**KC 1475 - E**