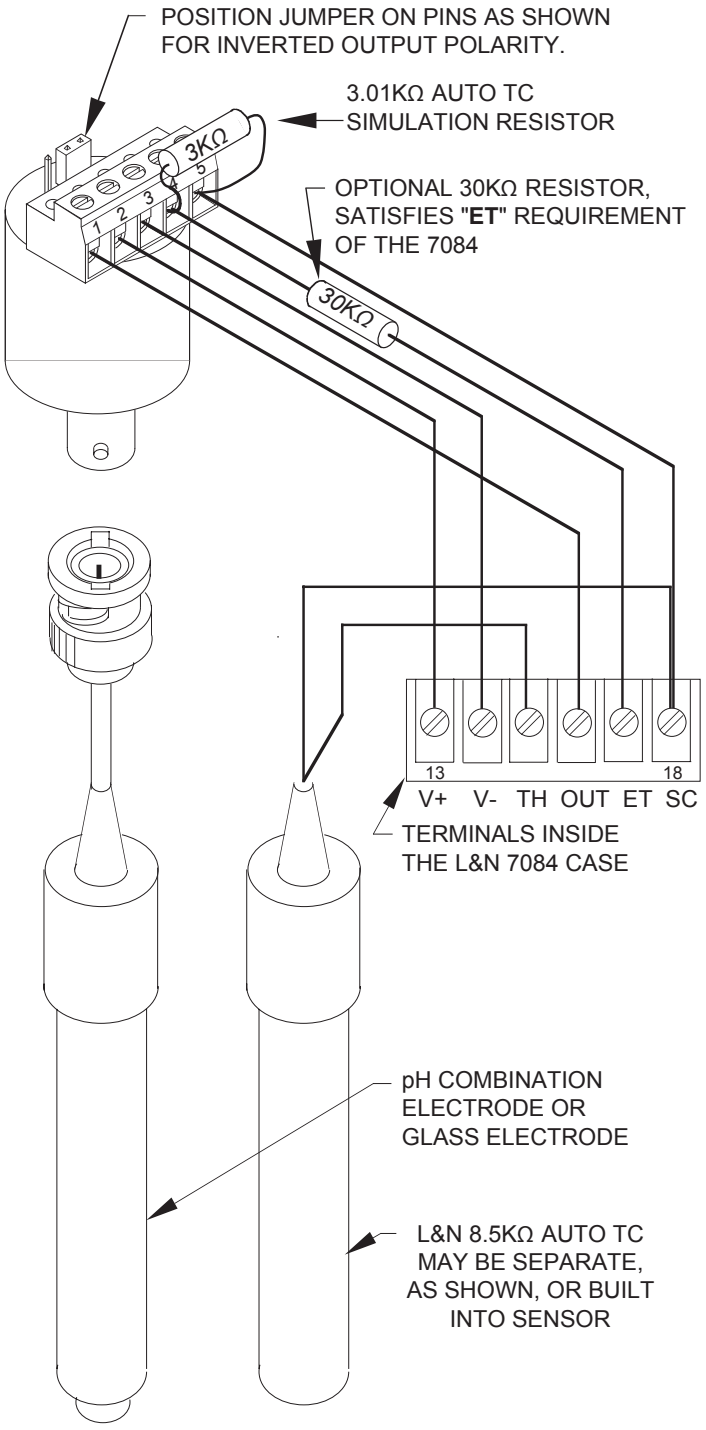

NOTES :

GENERAL

OUTPUT TO THE INSTRUMENT FROM THE PREAMP IS UNITY GAIN, INVERTED POLARITY.

WHEN A COMBINATION ELECTRODE IS USED, REFERENCE CONNECTION IS MADE THROUGH THE BNC CONNECTOR.

IF A SEPARATE REFERENCE CELL IS USED, CONNECT IT TO TERMINAL 5 OF THE PREAMP, AND LEAVE THE WIRE IN PLACE FROM 5 TO **SC**.

TEMPERATURE COMPENSATION

NORMAL 7084 TC IS ACCOMPLISHED WITH A NEGATIVE COEFFICIENT THERMISTOR THAT READS 8.5KΩ AT 25°C, CONNECTED AS SHOWN.

THE V1 AMPLIFIER CAN PERFORM AUTOMATIC COMPENSATION USING A 3KΩ AT 25°C BALCO ELEMENT, WITH A SLOPE OF +13.5Ω/°C. HOWEVER, IT IS PREFERABLE TO USE THE 8.5KΩ ELEMENT TO ENABLE THE 7084's FULL CONTROL CAPABILITIES, SO THE AMPLIFIER SHIPS WITH A 3.01KΩ RESISTOR BETWEEN TERMINALS 4 AND 5. IF YOU WISH TO USE A 3KΩ BALCO ELEMENT, THEN THE 3.01KΩ RESISTOR MUST BE REMOVED, AND THE BALCO CONNECTED IN ITS PLACE. THEN PLACE AN 8.5KΩ RESISTOR ACROSS **SC** AND **TH** TERMINALS IN THE 7084 INSTRUMENT CASE.

ONLY ONE AUTO TC CAN BE USED AT ONE TIME. REPLACE THE UNUSED ONE WITH A FIXED RESISTOR HAVING THE SAME VALUE AS THE UNUSED ELEMENT AT 25°C.

ELECTRODE TEST FEATURE (ET)

THE 30KΩ RESISTOR SIMULATES THE "ELECTRODE TEST" FUNCTION OF THE INSTRUMENT. IT MAY BE NECESSARY TO ADJUST THIS VALUE SLIGHTLY. OR, YOU CAN DISABLE **ET** AT THE INSTRUMENT KEYPAD. SEE 7084 MANUAL FOR INSTRUCTIONS.

SHIELDING

DON'T LET ANY OF THE LEADS, OR THE BNC CONNECTOR TOUCH METAL PIPING, CONDUIT, OR OTHER EARTH GROUNDS. THIS WILL CREATE A "GROUND LOOP" AND CAUSE VERY UNSTABLE READINGS.

NOTES UNLESS OTHERWISE SPECIFIED:

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DRAWN **BOB HUNT**	TITLE **V1 PREAMPLIFIER WIRING L&N SERIES 7084**		
CHECKED			
APPROVED	SCALE **NONE**	DRAWING NO. **V1-7084**	REV. **C**
	SHEET **1 OF 1**		