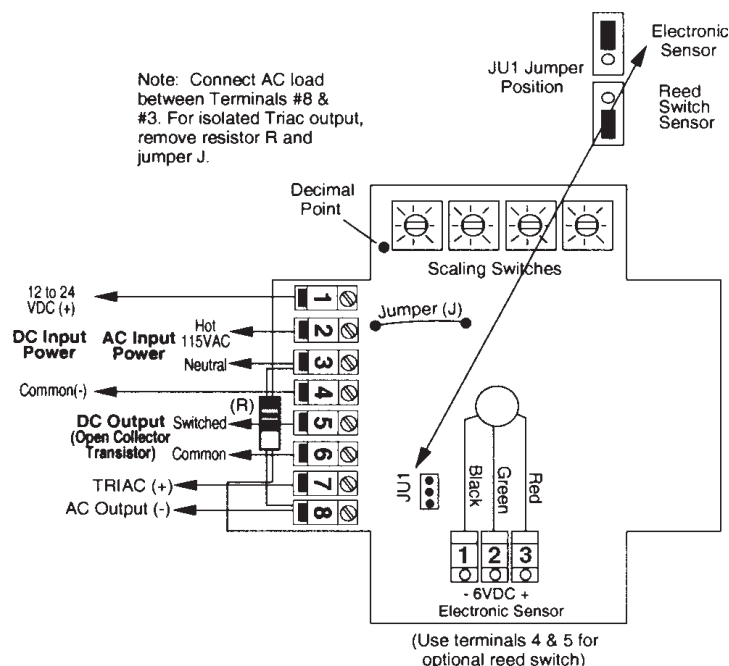


WIRING DIAGRAM	APPLICATION BRIEF
SCALE FACTOR FORMULA	
RE-CALIBRATION PROCEDURE	



THE DRAWING TO THE LEFT IS FOR CONCRETE BATCH PANELS THAT REQUIRE A 115 VAC HOT PULSE FOR METER COUNTER. IF PANEL REQUIRES A 115 VAC NEUT. METER COUNTER, REVERSE THE CONNECTION ON TERMINALS 2 AND 3.

IF UNSURE ABOUT VOLTAGE REQUIRED  
FOR METER COUNTER, IT IS RECOM-  
MENDED THAT YOU CONTACT BATCH  
PANEL MANUFACTURER.

## SCALE FACTOR FORMULAS

**U.S. GALLONS:**

$$\text{SCALE FACTOR} = \frac{1}{\text{DESIRED NO. OF GAL./PULSE} \times \text{METER INDEX}}$$

**IMPERIAL GALLONS:**

METER INDEX X 1.2009 = METER INDEX/IMP. GAL

$$\text{SCALE FACTOR} = \frac{1}{\text{DESIRED NO. OF IMP. GAL./PULSE} \times \text{METER INDEX/IMP. GAL.}}$$

**LITERS:**

METER INDEX X .2642 = METER INDEX/LITERS

$$\text{SCALE FACTOR} = \frac{1}{\text{DESIRED NO. OF LITERS/PULSE} \times \text{METER INDEX/LITERS}}$$



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# CALIBRATION PROCEDURE; BADGER METER ELECTRONIC SCALLABLE TRANSMITTERS

## STEP #1

RUN THREE TEST TO DETERMINE THE AMOUNT DELIVERED VERSES THE AMOUNT SHOWN ON THE BATCH COUNTER.

THESE TESTS SHOULD BE CONSISTENT WITH ONE ANOTHER.

## STEP#2

READ THE SCALE FACTOR SETTING ON THE METER TRANSMITTER. (REFERENCE: SCALING SWITCHES)

## STEP#3

USING THE FOLLOWING FORMULA, FIGURE THE NEW SCALE FACTOR FOR ERROR CORRECTION.

$$\frac{\text{QUANTITY DELIVERED}}{\text{QUANTITY ASKED FOR}} \times \text{OLD SCALE FACTOR} = \text{NEW SCALE FACTOR}$$

## STEP #4

SET NEW SCALE FACTOR ON METER TRANSMITTER.

### EXAMPLE:

THREE 100 GALLON TESTS WERE RUN WITH THE FOLLOWING RESULTS:

<u>DELIVERED AMOUNT</u>	<u>DISPLAYED AMOUNT</u>
103	100
102.5	100
103	100

EXISTING SCALE FACTOR IS .0403

$$\frac{102.8}{100} \times .0403 = .0414$$

SET SCALE SWITCHES AT .0414