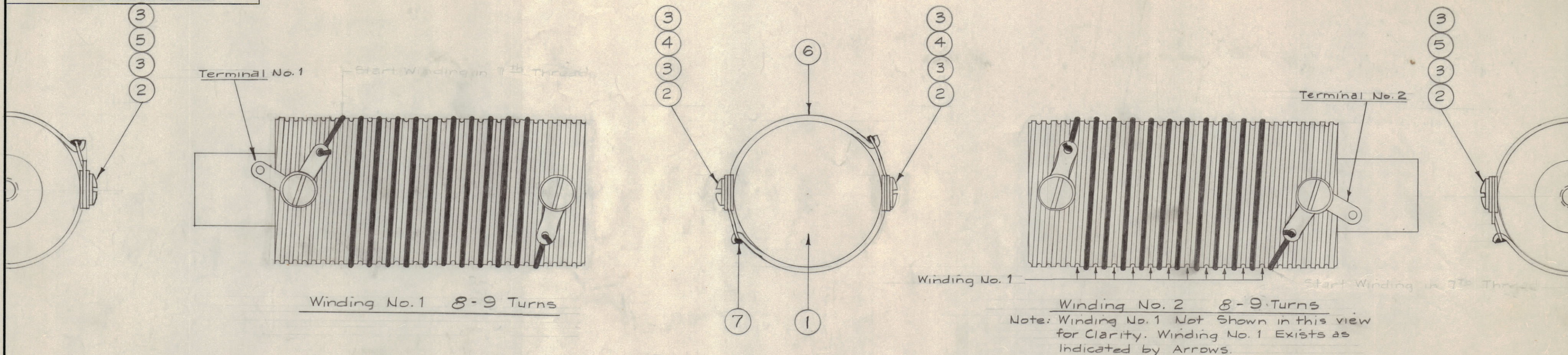


IF IT IS FOUND DESIRABLE TO CHANGE ANY TOLERANCE OR OTHER DETAIL SPECIFIED ON THIS DRAWING NOTIFY THE PURCHASER PROMPTLY.

MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES



ASSEMBLY PROCEDURE

1. FORM (ITEM 1) MUST BE FREE FROM SCRATCHES, BRUISES ETC.
  2. ASSEMBLE ALL HARDWARE TO FORM.
  3. WIND WINDING No. 1 AS SHOWN, SOLDER ENDS TO TERMINAL LUGS.
  4. WIND WINDING No. 2, AS SHOWN. SOLDER ENDS TO TERMINAL LUGS.
  5. REMOVE ALL EXCESS SOLDER.
  6. WASH COMPLETE UNIT WITH LIQUID SOAP AND LUKEWARM WATER AND THEN RINSE IN CLEAR TAP WATER.
- NOTE: CAUTION MUST BE EXERCISED AT THIS POINT. TOUCHING THE ACTIVE SURFACE OR ALLOWING IT TO COME IN CONTACT WITH ANYTHING BUT WAX PAPER WILL DESTROY THE SENSING ABILITY OF THE ELEMENT.
7. MOUNT 10 OF THE UNITS TO THE CENTRIFUGE PLATE AND SPIN THEM DRY FOR ABOUT ONE MINUTE.
  8. PLACE THE CENTRIFUGE PLATE AND THE 10 UNITS IN CLEAR BOILING WATER FOR ABOUT 5 MINUTES.
  9. REMOVE THE PLATE AND TEN UNITS AND PLACE THEM IN THE CENTRIFUGE. SPIN DRY FOR ONE MINUTE.
  10. PLACE THE PLATE AND 10 UNITS IN THE 1/25 MOLAR LITHIUM CHLORIDE SOLUTION AND ALLOW TO BOIL FOR 10 MINUTES.
  11. REPEAT STEP 9.
  12. ALLOW THE 10 UNITS TO DRY AT ROOM TEMPERATURE FOR ABOUT ONE HOUR.
  13. REMOVE THE MOISTURE SENSING UNITS FROM THE PLATE AND PLACE THEM INDIVIDUALLY IN THE TEST BRIDGE, REFER TO ELECTRICAL TESTS
- NOTE: UNIT MUST BE REJECTED AT ANY STAGE IN THE ASSEMBLY PROCEDURE WHERE DENTS, SCRATCHES ETC APPEAR.

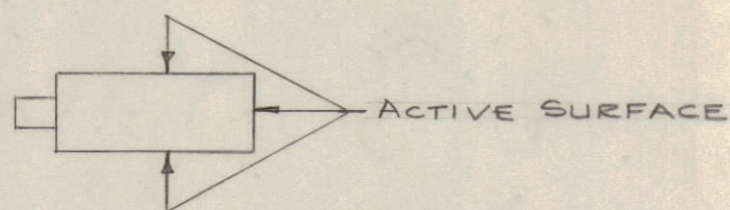
ELECTRICAL TEST

1. AFTER CLEANING THE SURFACE OF THE MOISTURE SENSING ELEMENT AND THE UNIT IS CHEMICALLY COATED AND DRIED, THE RESISTANCE BETWEEN WINDINGS #1 & #2 SHOULD NOT BE LESS THAN 500 K OHMS. THE HIGH RESISTANCE RANGE IS APPROXIMATELY 2-5 MEG OHMS.
2. USE AN ATOMIZER OR SPRINKLE A FEW DROPS OF DISTILLED WATER ON THE UNIT AND READ THE RESISTANCE BETWEEN WINDINGS #1 & #2 ON THE TEST BRIDGE. THE RESISTANCE READING SHOULD BE 10 K OHMS OR LESS.
3. ALLOW A REASONABLE LENGTH OF TIME FOR THE DROPLETS OF WATER TO EVAPORATE. THE DRYING PROCESS SHOULD TAKE PLACE IN <sup>THE</sup> OPEN PREFERABLY WITH AN ELECTRIC FAN BLOWING ON THEM TO SPEED UP THE EVAPORATION. RECHECK THE UNIT IN THE TEST BRIDGE. THE RESISTANCE VALUE, WHEN THE UNIT IS DRY SHOULD BE GREATER THAN 500 K OHMS.

LITHIUM CHLORIDE SOLUTION 1/25 M.

1. TO 5 PINTS OF DISTILLED WATER ADD 4 GRAMS OF PURE LITHIUM CHLORIDE.
2. HEAT SOLUTION TO BETWEEN 95° AND 100°C. THIS TEMPERATURE IS APPROXIMATED WHEN BOILING STARTS AND BUBBLES ARISE IN THE SOLUTION. DO NOT ALLOW THE SOLUTION TO BOIL VIGOROUSLY AS THE DISTILLED WATER WILL EVAPORATE AND THE SOLUTION WILL INCREASE IN STRENGTH. KEEP THE SOLUTION COVERED AS AN AID IN REDUCING EVAPORATION.
3. WHEN ABOUT 1/2 PINTS OF SOLUTION IS USED OR EVAPORATED MAKE A NEW SOLUTION.

A-1508 B



REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
X 7	BS-100	Solder, Soft	
X 6	WL-100-6	Wire, Buss #20 AWG	
2 5	TE-128-1	Terminal Lug, Dual, Locking	
2 4	TE-104-1	Terminal Lug, Locking	
8 3	FW04HBC	Washer, Flat	
4 2	SCBS0440BC5	Screw, Machine	
1 1	PX-398	Form, Humidity Indicator	

THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK			
STOCK SIZE			
HUMIDITY ELEMENT ASS'Y. (RR-123)			
MATERIAL		WEIGHT PER PC.	
TYPE & TEMPER			
DRAWN		ELEC. DES. APP.	
HEAT TREAT. SPEC.		MECH. DES. APP.	
CHECKED		FINAL APPROVAL	
RR-123(1)		A-1508 B	
FINISH & SPEC. NO.			

ISSUE	ITEM	CHANGED FROM	DATE	CN. NO.	DRAFTS	CHECKER	ENG. APP.
B	1	REVISED & EXTENDED ASSY PROC. & ELEC. TEST. ADDED LITH. CHLOR. SOLUTION	4/1/58	2	AVE		JER
A	1	STURNS WAS 9 TURNS	4/1/58	1	16	JAL	JER

TOLERANCES		SCALE:	
ALL OTHERS	DEC. DIM. ± FRAC. DIM. ± ANGULAR DIM. ±	DRILL, PUNCH, COMMERCIAL STOCK SIZES AND MANUFACTURERS TOLERANCES ARE NOT INCLUDED.	

1	ATS-70TU			2-20-58
1	ATS-50TU			2-20-58
REQ PER UNIT	MODEL	PROJECT NO.	ASS'Y. NO.	DATE
USED ON				