INSTALLATION PROCEDURE FOR E.H.T. OVERVOLT TRIP CCT. 2R176284/1

(T.S. CCT. DIAG. ATTACHED)

1. REMOVE BLUE COVERS FROM E.H.T. INTERFACE UNIT.

2. USING TEMPLATE DRILL 4 – 3.3 ϕ FIXING HOLES IN CHASSIS (I.E. NEXT TO DUMP CCT. BRD.). (I.E. 58 mm FROM SIDE & 15 mm FROM FRONT EDGE)

3. FIX P.C.B. IN POSITION USING SCREWS PROVIDED

4. WIRE TAILS ON P.C.B. AS FOLLOWS – (SEE ALSO CCT. DIAGRAM 2R176284)

a) WHITE WIRE TAIL ON INSULATED PILLAR TO SPARE HOLE NEXT TO EXISTING WHITE WIRE ON BOTTOM E.H.T. DISTRIBUTION P.C.B.

b) GREEN WIRE TO SPARE TERMINAL PIN ON DUMP P.C.B. LABELLED "0V"

c) RED WIRE TAIL IS + 15V SUPPLY. WIRE THIS TO PIN 3 ON 6 POLE LEMO LABELLED "POWER MODULE 24V. SUPPLY 'IN' CONNECTOR, AT THE SAME TIME LOOP IN 7/0.2 RED P.T.F.E. WIRE TO PIN 3 ON 'OUT' CONNECTOR AS SHOWN ON CCT. DIAGRAM.

d) BLUE WIRE TAIL IS – 15V SUPPLY.

WIRE THIS TO PIN 4 ON 6 POLE LEMO, AGAIN LOOP A BLUE P.T.F.E. WIRE TO PIN 4 ON 'OUT' CONNECTOR AS SHOWN ON CCT. DIAGRAM.

e) GREY WIRE TO JUNCTION OF RESISTOR "R1" & "R2" ON "DUMP CCT" P.C.B. PLEASE LOOP WIRE ROUND RESISTOR LEG MAKING SURE A GOOD MECHANICAL JOINT IS OBTAINED. SEE CIRCUIT DIAGRAM FOR DETAILS

ELECTRICAL TEST & SETTING UP PROCEDURE

EQUIPMENT

1 - PAG 344 E.H.T. MODULE
1 - PAG 339 POWER MODULE
1 - DVM 0 - 30V

1. FIT BLUE COVERS EXCEPT SIDE COVER NEAREST O/V CCT. P.C.B.

2. CONNECT POWER MODULE PAG 339 & E.H.T. MODULE PAG 344 IN USUAL WAY. USING 6 POLE LEAD CONNECT FROM PAG 339 TO E.H.T. INTERFACE. FIT COAX LEAD FROM PAG 344 ALARM O/P TO E.H.T. STATUS INPUT ON E.H.T. INTERFACE. FIT 2 POLE LEAD FROM PAG 399 TRIP I/P TO POWER MODULE INTERLOCK 'IN' CONNECTOR. FIT SHORTED LINKED CONNECTOR IN "OUTPUT"

(cont)

INTERLOCK CONNECTOR.
N.B. DO NOT CONNECT H.V. CABLE AT THIS STAGE!

3. SWITCH PAG 339 ON AND CHECK ± 15V RAILS ON O/V TRIP P.C.B.

4. FIT PROBE ONTO TEST POINT ON O/V P.C.B. ADJUST POT TO -ve 0.1V

5. FIT H.V. CABLE FROM PAG 344 TO E.H.T. DISTRIBUTION UNIT

6. WITH OUTPUT SET TO ZERO SWITCH PAG 344 UNIT ON, "DUMP CONTACTS OPEN" INDICATOR SHOULD NOW BE ON. ROTATE SET OUTPUT KNOB, OVERVOLT TRIP SHOULD OPERATE @ 100VOLTS INDICATED BY 'DUMP CONTACTS INDICATOR" GOING OFF.

7. SWITCH PAG 344 E.H.T. SUPPLY OFF & REMOVE S.H.V. LEAD.
ADJUST POT ON O/V TRIP P.C.B TO -ve 1.3 VOLTS.
FIT S.H.V. LEAD.
MAKE SURE ALL HANDS AND OTHER OBJECTS ARE WELL AWAY FROM E.H.T INTERFACE UNIT.
SWITCH PAG 344 UNIT ON, INDICATOR LIGHT SHOULD BE ON, ADJUST POT ON POWER SUPPLY GRADUALLY INCREASING TO -1.3 KV. O/V TRIP SHOULD OPERATE AT THIS VOLTAGE.

A D.V.M. COULD BE CONNECTED TO O/P VOLTAGE MONITOR IN ORDER TO CHECK THE ACTUAL O/P VOLTAGE FROM PAG 344 E.H.T. SUPPLY UNIT.

8 WITH D.V.M. CHECK THE THAT -
+ 15V. IS ON PIN 3
- 15V, IS ON PIN 4
OF POWER MODULE 24 SUPPLY 'OUT'
6 POLE CONNECTOR ON E.H.T. INTERFACE
UNIT (BECAUSE THIS LINKS THE SUPLY TO NEXT UNIT)

9 FINALLY RUN VOLTAGE 'UP' TO
1·3KV A COUPLE OF TIMES TO
SEE IF TRIP OPERATES CORRECTLY.

J E SIMMONS
RAL
R63.