Desco Industries Inc.
PRODUCTION TEST PROCEDURE

1.0 EQUIPMENT REQUIRED

1.1 ±10,000 Volt Reference Supply Ref # 1560
1.2 282 Holding Fixture w/ DVM Ref # 1564
1.3 Oscilloscope Tek 2246 (or equivalent)

2.0 TEST

2.1 Connect UTT to a 9 volt battery and press " On/Zero" pushbutton for 2 to 3 seconds, then release. Unit LED'S will blink the Version code and the display will show some number, then go off. Press the pushbutton again for 2 to 3 seconds and the display should come on and the LED'S should be flashing.

2.2 Install unit in holding fixture. Slide unit forward until stop is reached.

2.3 With unit under test looking at ground, adjust the ZERO pot (left side on back of unit) until unit display reads 0.00 ±10 counts. (-0.10 to +0.10)

NOTE: This must be done at initial power up. You cannot go back and re-zero without removing the battery and repeating Step 2.1.

2.4 Connect DVM to the output jack and check that it agrees with the unit display.

2.5 Hold down the "On/Zero" pushbutton until the display reads 0.00 (between –0.05 and+0.05) [Typically reads between –0.01 and +0.01].

2.6 Apply +10KV to the holding fixture plate. Check that the display reads +10.00 (9.50 to 10.50). If not, adjust the CAL pot (right side on back of unit) for +10.00 on the display. DVM should indicate 1.00 volts (.95 to 1.05).

2.7 Change polarity to minus and apply –10 KV to plate. Check that the display reads -10.00 (-9.50 to-10.50) and DVM reads –1.00 volts (-.95 to –1.05).

2.8 Apply –1KV to plate and check that the display reads –1.00 (-.95 to -1.05)

2.9 Change polarity to plus and apply +1KV to plate. Check display for +1.00 (.95 to 1.05).

2.10 Apply 1KV to the plate again and press the " Hold" pushbutton momentarily. The word "hold" should appear on the display. Release the plate voltage and check that the voltage reading remains on the display. Momentarily press the " Hold" pushbutton again. The word "hold" and the voltage reading on the display should go off.

2.11 Press and hold the "Hold" pushbutton. After a few seconds the UUT should shut off.

3.0 SPEED OF RESPONSE AND NOISE (Sample check 1 unit for every 50 units)

3.1 Remove DVM from UUT output and connect oscilloscope to output. Apply a +3KV step to the holding fixture. Check that the speed of response is < 80 msec. Record rise and fall

times (10% to90%).

3.2 With zero volts on test plate, obtain a peak to peak noise figure from the oscilloscope. This spec is currently undefined. Record this data for reference.

4.0 BURN IN

4.1 Burn-in all units for 24 hours.

4.2 After burn-in, re-check zero and ±10KV calibration.

4.3 Test stamp units inside battery compartment and send to final. Do not install batteries.