

UPPER-AIR ART-1 MAINTENANCE NOTE  
(for Electronics Technicians)

1. ART-1/GMD Slip Ring Test

General:

1. The following items are supplied in the test kit.
  - a. multivibrator chassis box
  - b. slip ring selector chassis box
  - c. cable assembly
  - d. slip ring jumpers
2. Figure 1 depicts the overall cable assembly for the slip ring test.

Purpose:

1. To provide the electronics technician at ART-1 stations a procedure for testing the ART-1/GMD slip rings.

Procedure:

1. Remove all power to the pedestal.
2. Disconnect all leads from terminal strips E706 and E707 in the azimuth unit.
3. Connect the supplied Slip Ring Jumpers to E706 and E707.
4. Disconnect connectors P701 and P702 from their mating sockets located on the GMD housing assembly.
5. Connect the sockets on the supplied cable assembly to P701 and P702.
6. To check slip rings, connect the first five leads on the cable assembly to the barrier strip on the Slip Ring Selector, in sequence, as shown in Figure 1.
7. Connect the battery located inside the Multivibrator Chassis Box. Connect the MV output lead (terminated with a spade lug) to a jumpered terminal on E706 or E707. Turn the MV switch to the ON position.

8. Connect the oscilloscope to the output of the Slip Ring Selector. Connect the common lead (black) from the MV to the common lead from the oscilloscope.
9. Observe the square wave displayed on the oscilloscope as the azimuth unit is manually rotated 360 degrees. A noisy signal indicates a dirty or defective slip ring or contact.
10. After observing all five positions, disconnect the leads from the Slip Ring Selector barrier strip and connect the next five leads in sequence. Continue until all slip rings have been observed.
11. Reconnect the leads removed in Step 2 and the connectors removed in Step 4.
12. Apply power and test pedestal for proper operation.

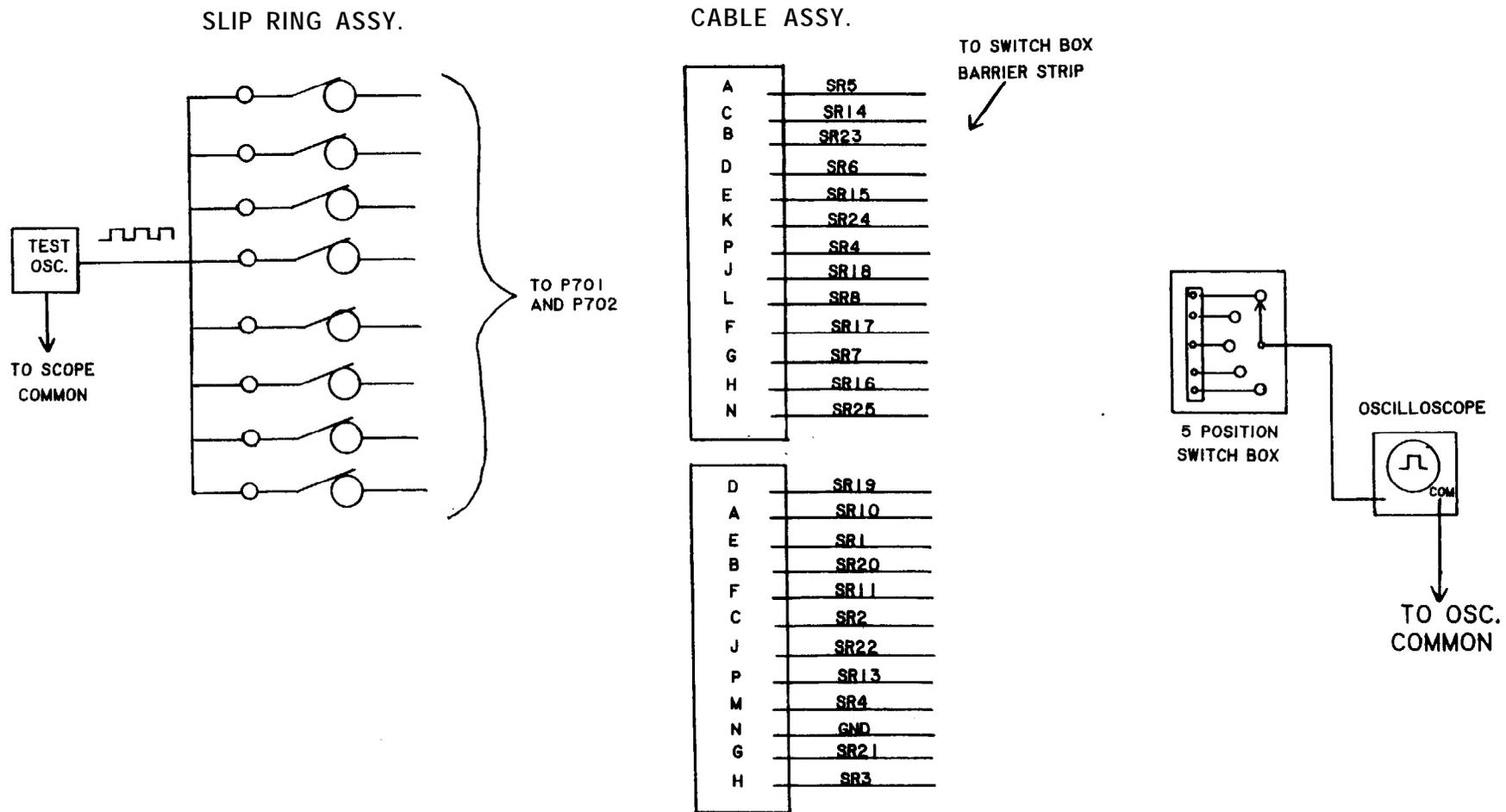


FIGURE 1