

**MAKE BUSY CIRCUITS**  
**NO. 1 OFFICE**

**1. GENERAL:**

- 1.1 This routine covers a method of testing the jacks and cords which are provided at the "A" boards for the purpose of making outgoing trunks busy.
- 1.2 Before starting the test, care should be taken to see that all resistance is cut in on the current flow test set to avoid damaging the milammeter. On the No. 35-C or No. 35-A set, all resistance is cut in when all resistance slides are to the extreme right.
- 1.3 When using the current flow test set, care should be taken to see that the scale-change key, designated MIL-AMPS, is not operated from its normal position during the test, since all desired readings may be made with sufficient accuracy on the high scale, and since it is possible under a trouble condition to obtain a full scale deflection on the high scale. This precaution will keep the current value within the limits of the milammeter scale used, thus avoiding damage to the milammeter.

**2. APPARATUS:**

- 2.1 No. 35-C or No. 35-A test set.

**3. METHOD:**

- 3.1 Arrange test set keys and switches as shown in the following table:

KEYS	POSITION
1	Closed
2	Open
3	Open
4	Open
Batt. & Grd. C. O.	Operated
Rev.	Operated
Mil-amps.	Normal
SWITCHES	POSITION
Grd.	Closed
500 & Lamp-10	Open
Resist. Switches	{ 25000—No. 35-A 0—No. 35-C

- 3.2 Supply ground to test set by inserting the plug of an "A" cord into the TEST BATT & GRD jack.
- 3.3 Take a make busy cord and insert the plug which is common to the three conductors in one of the make busy jacks. Insert one of the other plugs of the make busy cord into the TEST S jack of the test set.
- 3.4 Move No. 1 resistance slides to the left until a reading of .075 ampere is observed on the milammeter. Without changing the position of the slides, test the other two conductors of the make busy cord. The readings should not deviate by more than approximately .005 ampere. If the indications are that the first circuit is defective, the current value should be set up again, using another conductor, and this set-up should be used for checking the remainder of the circuits.
- 3.5 Move the plug which is in the make busy jack up and down with slight pressure and shake the cord at both ends. Note any change in the reading on the milammeter which would indicate a cutout.
- 3.6 Without changing the position of the slides, repeat the test, using each conductor of the make busy cord. Observe any variations in the uniformity of the readings which would indicate troubles such as crosses, grounds, opens or a short-circuited resistance. Slight deviations of plus or minus approximately .005 ampere may be due to allowable variations in the resistance.
- 3.7 Repeat the test on each make busy jack, using a different cord in each jack. If the number of cords and jacks do not coincide, continue the test until all of each are tested.

**4. REPORTS:**

- 4.1 The required record of this routine should be entered on the proper form.