MANUAL CHANGES

MODEL 8690A
SWEEP OSCILLATOR

Manual Serial Prefixed: 646-
Manual Printed: January 1967

MAKE ALL CORRECTIONS IN THIS MANUAL ACCORDING TO ERRATA BELOW, THEN CHECK THE FOLLOWING TABLE FOR YOUR INSTRUMENT SERIAL PREFIX (3 DIGITS) OR SERIAL NUMBER (8 DIGITS) AND MAKE ANY LISTED CHANGE(S) IN THE MANUAL.

► NEW ITEM.

SERIAL PREFIX OR NUMBER	MAKE MANUAL CHANGES
646- Above 00510	1
707-	1, 2
711-	1, 2, 3
717-	1, 2, 3, 4

SERIAL PREFIX OR NUMBER	MAKE MANUAL CHANGES
724-	1, 2, 3, 4, 5
732-	1, 2,3,4,5,6

ERRATA: Parts List:
Change Switch S4 (ALC) from stock number 3101-0078 to 3101-0043.

Figure 7-4:
Add wire color 97 to -83 VDC connectors to A2 Ass'y.

Figure 7-8:
Change A8C8 to read A8C6.

Show T2 terminal "7" at wire color 914 connection to T2 from A9CR2.

Figure 7-9 and Parts List:
Recommended replacement for A6Q1 thru A6Q4 is stock number 1854-0237 (some instruments may have stock number 1854-0227 as original part).

Add wire color 97 to -83 VDC connection at XA5, pin 1.

Parts List:
Add the following listings:

J11, stock number 1251-1323, connector HV
J12, stock number 1251-0137, connector LV
B1, stock number 5060-0878, Filter: Air

CHANGE 1: Figure 7-8 and Parts List:
Change A14R17 to factory selected value (show asterisk adjacent to A14R17): typical value 5.62 k, stock number 0757-0200.

Figure 7-9 and Parts List:
Add A5V3 in parallel with A5C3. A5V3 is electron Tube, 82.0V ± 1V, stock number 1940-0013.

Change schematic to show anode of A5V3 connected to A5V1 pin 6, and cathode of A5V3 connected to ground. +164V at A5 Test Point 4 should read +82V. Voltage at Pin 1 of A5V1 should read 48.5V.

Delete the following parts: A5R3, A5R8, A5R26, A5R28.

Change A5R25 from 68.1 k, stock number 0757-0855 to 22 k, stock number 0686-2235.

Change A5R15 from 100 k, stock number 0757-0465 to 51.1 k, stock number 0757-0458.

Change A5R16 from 27 k, stock number 0764-0007 to 17 k, stock number 0767-0017.

Change A5R17 from 511 ohms, stock number 0757-0416 to 8.2 k, stock number 0693-8221.

Change A5R18 from 61.9k, stock number 0757-0460 to 26.1k, stock number 0698-3159.

Change schematic to show +82V at junction of A5R17 and A5R18 (Test Point A5TP4)

Change A9R6 from 33 k, stock number 0687-3331 to 5.6 k, stock number 0687-5621.
Change schematic to show A5R40 as 316K.

Figure 7-6 and Parts List:
Change A11R7 and A11R23 from 5.11k, stock number 0757-0438 to 21.5k, stock number 0757-0199.

CHANGE 2: Figure 7-9 and Parts List:
Change A5R22 and A5R32 from 20 k, stock number 2100-1762 to 5 k, stock number 2100-1760.
Change A5R31 from 51.1 k, stock number 0757-0458 to 61.9 k, stock number 0757-0460.

CHANGE 3: Figure 7-9 and Parts List:
Change A5C3 from 0.05 μF, stock number 0150-0052 to 0.01 μF, stock number 0150-0012.

Change A5R11 from 1.33k, stock number 0757-0317 to 100 ohms, stock number 0684-1011.

Add listing to parts list for A6R3 and A6R4. Description and stock number is same as for A6R1 and A6R2.

CHANGE 4: Figure 7-2 and Parts List:

Change R3 from 27.4k, stock number 0757-0452 to 22k, stock number 0687-2231.
Indicate "Factory selected part; typical value given" by an asterisk.

Figure 7-6 and Parts List:
Change A11R40 from 20k, stock number 0757-0449 to 15k, stock number 0757-0446. Indicate A11R40 as "factory selected part; typical value given" by an asterisk.

Change R2R32 from 200k, stock number 0757-0128 to 221k, stock number 0757-0862. Indicate A2R32 as "factory selected part; typical value given" by an asterisk.

Figure 7-8 and Parts List:
Add three 10k ohm, 1/2 watt resistors, stock number 0686-1035 as follows:

R24 in parallel with C4;
R25 in parallel with C3;
R26 in parallel with C5.

Paragraph 5-7:
Delete reference to coating air filter with oil; oil is not required.

CHANGE 5: Table 1-1:
For the following Models, change the "Frequency Accuracy" specification column to read:

8698A	1 % of full scale
8692B	20 MHz
H01-8692B	25 MHz
8693B	40 MHz
H01-8693B	45 MHz
8694B	40 MHz
H01-8694B	50 MHz
H02-8694B	40 MHz

Table 1-2:
Change FREQUENCY MARKERS Accuracy specification to read: "1% of full scale for all RF Units."

Note

The following wiring addition ensures good contact for ALC circuit connections.

Figure 7-6 and Table 5-5:
Add jumper on P12, between pins 32 and 26.

Figure 7-7 and Table 5-5:
Add jumper on P12, between pins 16 and 10.

CHANGE 5: (Cont'd)

Table 5-4:
Change ±0.10 Vdc tolerances to ±0.40 Vdc in the following adjustment procedures:

Adjustment 5. Frequency Control Calibration; Low End
6. Helix Feedback Amplifier Gain
8. Frequency Control Calibration; High End
11. ΔF Calibration: ΔF Center Frequency
12. ΔF Calibration; ΔF Zero

Figure 5-15, Flow 8:
Change ±0.10 Vdc tolerances to read ±0.40 Vdc.

CHANGE 6:

Figure 7-6 and Parts List:
Change A11R40* (factory selected value) to 18.2K, 1%, stock number 0757-0448. This is the most typical value.

Figure 7-2 and Parts List:
Change A10R22 from 6190 ohms, stock number 0757-0290 to 100 ohms, stock number 0757-0401.

Figure 7-3 and Parts List:
Change A3R17 from 100K, stock number 0764-0028 to 220K, stock number 0690-2241.

Change A3V5 stock number from 1932-0030 to 1932-0065.

Parts List:
Change B1 stock number to 3160-0097.